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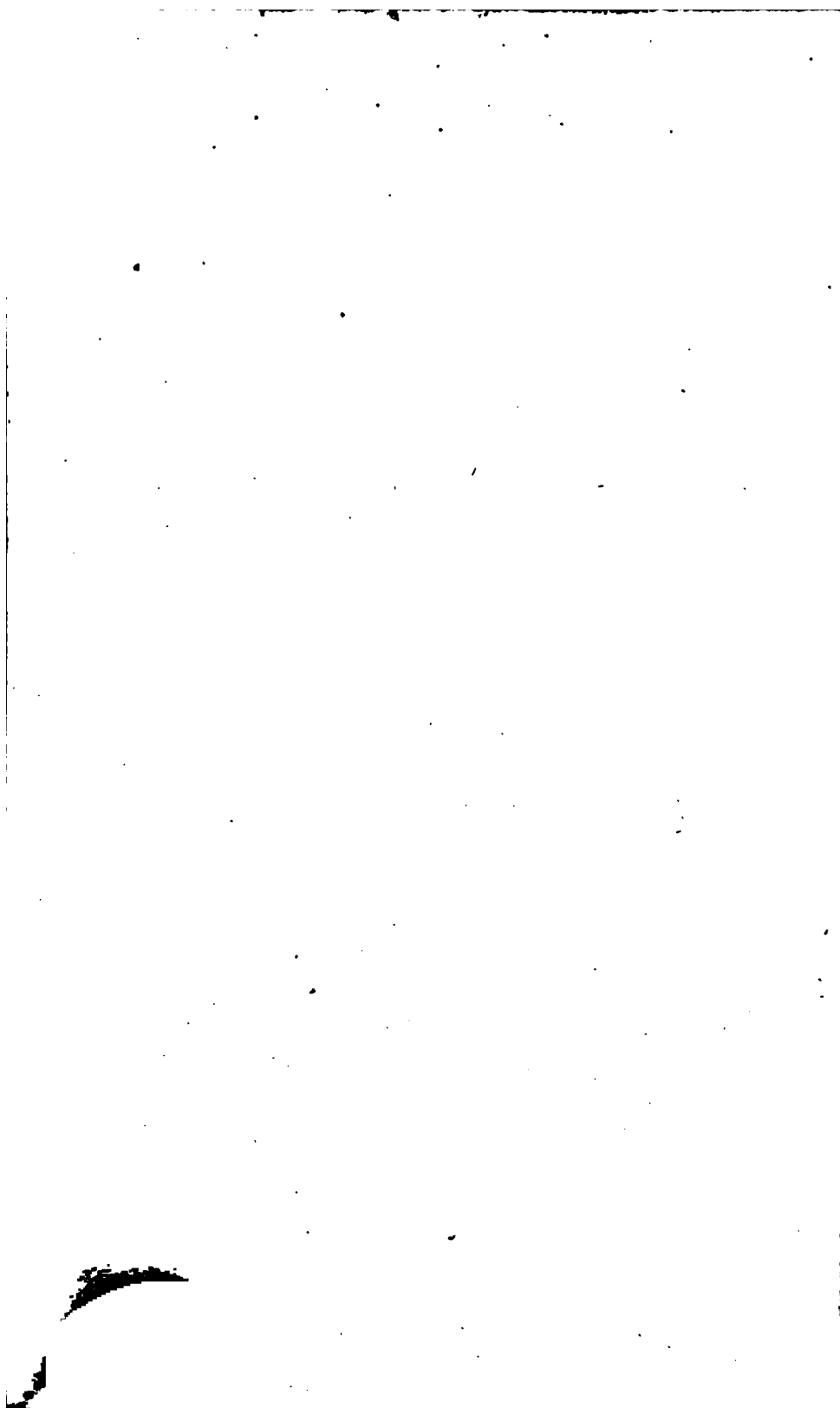
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Et quoniam variant morbi, variabimus artes;
Mille mali species, mille salutis erunt.



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[NO 31, *New Series*.]

For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work, to which the Faculty, in Europe and America, were under deeper obligations than to the *Medical and Physical Journal of London*, now forming a long, but an invaluable series.—RUSH.

ORIGINAL PAPERS,

AND

CASES OBTAINED FROM PUBLIC INSTITUTIONS AND OTHER
AUTHENTIC SOURCES.

INFLAMMATION OF THE EYES.

Continuation of the Cases illustrative of the Practice pursued at the ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, and of the new Remedies latterly employed in various States of Disease. By G. J. GUTHRIE, F.R.S. Professor of Anatomy and Surgery to the Royal College of Surgeons; Surgeon to the Westminster Hospital; and to the Royal Westminster Ophthalmic Hospital.

THE first three cases show the superiority of the stimulant ointments in disease of long standing, where other remedies appeared to be of little use, or had failed. The eighth, twelfth, and thirteenth show their efficacy in chronic inflammation combined with ulceration. The ninth, tenth, eleventh, and fourteenth prove the utility of the Ung. Argent. Nitrat. in the purulent inflammation of children. The fifth case is a comparative trial of the merits of the two ointments. The fourth and sixth the rapid manner in which a cure is sometimes effected. The fifteenth and seventeenth are comparative trials of different modes of treatment. The twentieth, twenty-first, and twenty-second deserve particular attention, as showing an influence exerted by these remedies they were not in any way suspected to possess. The twenty-third is added as illustrative of the efficacy of an opposite mode of treatment, and to demonstrate the advantage resulting from due discrimination in the treatment of ophthalmic diseases.

CASE I.—Margaret Murphy, aged eleven, admitted August 5, 1828. Has had chronic inflammation of both eyes for three years,

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B

ending in May last, at which time she was put on the use of the Ung. Argent. Nitrat. At the commencement of the three years, and at intervals afterwards, she attended at the Infirmary, but with little benefit. The eyes were red and painful; she was incapable of bearing the light, and the lids were often almost spasmodically closed. She took medicines of every description, but unavailingly. From the first application of the Argentum Nitratum ointment, she received some relief, which each succeeding one increased, until she was quite well.

The mother is under treatment with the same disease.

Case kept by Mr. GUTHRIE.

CASE II.—Ralph Staton, aged fifty-four, has had bad eyes for three years, proceeding (he thinks) from reading a great deal by candle light; had severe pains in his head at the commencement of the disease, and at different periods of the three years; has suffered frequent violent recurrence of acute inflammation. There is now a lippitudinous affection of the lids; redness of the conjunctivæ, which are villous, and almost granulated; a great discharge of hot water and of a glutinous matter, particularly at night; a nebula on the cornea of the left eye; general health very good. He has had leeches and blisters at different times.

August 9th.—The Ung. Argent. Nitrat. applied to both eyes.

10th.—The smarting from the ointment lasted three-quarters of an hour, after which he could see better than he had done for three months. The discharge greatly diminished.

11th.—Repeat Unguent.

16th.—Absented himself for several days, and the inflammation of the left eye has returned.

C. cum ferro, ad ℥ij. temporis sinistro.—Ung. Arg. Nitr. dextro oculo.

19th.—Better. Repeat ointment to both eyes.

21st.—Rapidly improving. Repeat Unguent.

Discharged cured.—Case kept by Mr. TAYLOR.

CASE III.—June 21st: Francis Westbrooke, aged eighteen, has had sore eyes for seven years, better and worse. Four years ago was under Mr. Guthrie's care, for a year and a half, when he got well, but the disease has gradually returned. At present, can scarcely open either eye, particularly the right, and cannot allow them to be touched; the sensibility is extreme to light, and there is an almost constant spasmodic winking of the lid; the discharge considerable; pain great.

Ung. Argent. Nitrat.

24th.—Repeat. 26th.—Repeat.

July 1st.—Repeat. 3d.—Is much better.

The ointment continued every second or third day, until the 5th of August, when the spasmodic winking of the lid, and the extreme sensibility, were said to be removed.

August 19th.—Nearly well.

Sept. 2d.—Discharged cured.—Case kept by Mr. TAYLOR.

CASE IV.—Elizabeth Espenin, aged four; August 23d, 1828. Both eyes have been bad for three months, but they are now worse than ever. Pustules on the cornea of both eyes, with numerous red vessels running from the conjunctivæ to them; great intolerance of light; pain in the head; bowels very irregular; eruptions about the nose and mouth.

R. Hydr. cum Creta et Rheo gr. x. omni nocte. Infus. Sennæ mane.—Ung. Argent. Nitrat. to both eyes.

24th.—Both eyes nearly well; bowels very much purged.

Omit the Senna. Repeat the powder and the ointment.

25th.—Better. Repeat.

27th.—Could not see on the 22d: is now all but well.

The ointment to be omitted; the purgatives to be continued until the eruption disappears.

Case kept by Mr. TAYLOR.

CASE V.—Edward Riley, nine months old; admitted 17th July with purulent inflammation; was taken ill Saturday, 12th July, the eye appearing weak. On Monday, the 14th, a great watery discharge came on, accompanied by matter; the conjunctivæ very red; the eyelids constantly closed.

17th.—To the left eye, the Ung. Hydr. Oxymur.; to the right, the Ung. Argent. Nitrat.

19th.—Both eyes are better from the application of the ointments, but the right has improved the most.

Repeat the ointments.

21st.—The right eye is nearly well; the left is better; the discharge has nearly ceased; the eyes are both open; the cornea of the left muddy.

The Ung. Argent. Nitr. to the right; nothing to the left.

24th.—Right eye cured.

To the left, the Ung. Hydr. Oxymur.

26th.—Repeat.

29th.—In this case a comparison was instituted between the two ointments, the eyes being nearly similarly affected. The Ung. Hydr. Oxym. did not seem to act as well as the Ung. Argent. Nit. which was therefore directed to be applied to the left.

31st.—The left eye, since the application of the Ung. Argent. Nitr., is considerably better.

Aug. 4, 7, 12, 19.—Repeated the ointment each day, and cured.

Case kept by Dr. POCKROWSKY.

CASE VI.—Charles Davies, aged sixteen; admitted 16th Aug. Has been ill a month with inflammation and purulent discharge from both eyes; the conjunctivæ of the lids red and swollen, and extending also to that of the globe.

Ung. Argent. Nitrat. to both eyes.

18th.—Declares himself greatly relieved; the pain and uneasiness less, as well as the discharge.—Repeat ointment.

August 19th and 20th.—Did not attend.

21st.—Says he is cured by two applications.

Case kept by Mr. TAYLOR.

CASE VII.—Mary Ann Fensom, aged fifteen; admitted Jan. 16th, 1828. Catarrhal inflammation, which came on Sunday the 14th, with pain in the eye and headache; a running of hot water, and a feeling as if the eyes were full of sand; there is a little mucopurulent discharge, and a general redness of the conjunctivæ.

The Ung. Argent. Nitr. to the left eye; warm water to the right.—Three leeches. Pulv. Jalap. C. ʒi.

18th.—The left eye, to which the ointment has been applied, is much better; the right eye much the same.

Repeat, and to both eyes.

21st.—Apply the ointment to both eyes.

24th.—Cured; and “deserving of remark.” J. BELL.

The progress of the disease was checked after the second application of the ointment. J. B.

CASE VIII.—Mary Tuckley, aged four years and a half; admitted 29th July, 1828. Ulcer of the cornea of the left eye, with several large vessels running to it; chronic.

Ung. Argent. Nitrat.

31st.—Much better.

August 1st, 5th, 7th.—Nearly well.

12th.—All trace of inflammation gone: a small white spot marks the place where the ulcer was. J. BELL.

CASE IX.—John Clark, five years old; admitted February 28, 1828, with purulent inflammation of both eyes, which is supposed to have been caught from his sister, who is now recovering. Discharge considerable, with great intolerance of light.

Ung. Argent. Nitr. to both eyes.—Hydr. Submur. gr. iv. o. n. Infus. Sennæ mane.

March 2d.—Better. 4th, 7th.—Repeat.

13th.—Discharged cured.

Lives in Manor Gardens, Chelsea.

CASE X.—Mary Ann Stockhill, aged seven; admitted March 18th, with purulent inflammation of the lids; the conjunctiva covering the ball not much affected.

Hydrarg. cum Creta gr. vj. o. n.—Lotio Aluminis.

20th.—Is much the same.

Apply the Unguent. Argent. Nitrat. to both eyes.

21st.—Nearly well. 23d.—Cured.

Lives, 8, Brownlow street, Drury lane. Case by Mr. FERNIE.

CASE XI.—Charlotte English, aged five; admitted April 22d, 1828, with purulent inflammation of the eyelids. Has a sister ill, from whom she is supposed to have caught the complaint. Ill two days. Considerable discharge, and intolerance of light.

Mr. Guthrie on *Inflammations of the Eye.* 5

Ung. Argent. Nitr. to both eyes.—Hydr. Submur. gr. iij. nocte. Inf. Sennæ mane.

26th.—Repeat.

29th.—Better in every respect, Repeat. May 3d. Well.

Case kept by Mr. MARSHALL.

CASE XII.—Mary Anne Strange, six years old; admitted March 20, 1828. Chronic inflammation of both eyes, with ulceration of the upper part of both corneæ, following small-pox; general muddiness of each.

Ung. Argent. Nitr.—Inf. Sennæ.

25th.—Very much better. Repeat Inf. Sennæ and ointment.

27th.—Improving fast. Repeat. April 10th.—Ulcers healed.

17th.—Repeat. 29th.—Discharged cured.

Case kept by Mr. HALL.

CASE XIII.—Harriet Woodcock; admitted June 5th, 1828, with inflammation of the conjunctivæ and ulceration of the corneæ, after small-pox.

R. Hydr. Submur. gr. iv. h. somni. Inf. Sennæ mane.—Ung. Argent Nitrat.

June 6th.—Repeat pilula. Magnes. Sulph. ʒss. mane.

10th.—Improving. Repeat pilula, unguent., et Inf. Sennæ.

12th.—Repeat. 17th.—Repeat. 19th.—Repeat.

24th.—Discharged cured. Case kept by Mr. R. BELL.

CASE XIV.—Falconer, three weeks old; admitted 19th June, 1828, with purulent inflammation, which he has had from his birth. The lids are red and much swollen, with considerable purulent discharge; the child cannot open the eyes.

Ol. Ricini.—Ung. Argent. Nitr. to both.

20th.—The mother says the child is much better.

Repeat Ol. Ricini only.

22d, 24th, 26th, 28th; July 1st, 2d.—Each day the ointment repeated; and, on the 5th, discharged cured.

CASE XV.—William Faythorn, aged nine; admitted 16th July, with pustular inflammation of both eyes.

Right eye, apply Ung. Hydr. Oxymer.; left eye, Ung. Argent. Nitr.

12th.—Both ointments have answered exceedingly well, and both have effected a cure by one application.

Case by Dr. POCKROWSKY.

CASE XVI.—Michael Rooke, aged six; admitted 24th July, 1828, with catarrhal inflammation of the right eye, of four days' standing. Complains of headache and pain in the eye, which is very red, and in a state of considerable chemosis.

Hydr. Subm. gr. iv. Inf. Sennæ.—Ung. Argent. Nitrat.

26th.—The right eye better, but the left was attacked yesterday. The conjunctiva is covered in places by patches of red, like extra-

vasation; the eye is very painful; discharges hot water and matter, and feels, he says, like sand in it.

Apply the Ung. Argent. Nitrat. to both.

29th.—Discharged cured. Case by Mr. R. D. MITCHELL.

CASE XVII.—Thomas Elwick, aged eight; admitted January 1, 1828, with inflammation and ulcers of the cornea.

Three leeches. Calomel gr. iij. o. n. Inf. Sennæ. Empl. Lyttæ.

3d.—Repeat the leeches, pill, and senna.

8th.—Better, and to continue the remedies.

15th, 22d.—The inflammation having subsided, and becoming apparently chronic, the ulceration remaining stationary, the Solut. Argent. Nitrat., four grains to the ounce, to be applied. The pills and senna to be repeated.

February 1st.—Much the same.

9th.—Stationary: repeat pill and senna.

19th.—If any thing, rather worse.

21st.—To be cupped behind each ear to two ounces.

Hydr. cum Creta et Rheo gr. viij. bis die.

28th.—Has gradually become worse: cannot open the eyes, which are very irritable, and the intolerance of light is great; discharge cold.

The Ung. Argent. Nitrat. to be well applied to both eyes, and no other remedy.

March 2d.—Is very much better; has opened both eyes, and can look about him, bearing the light tolerably well.

Repeat the ointment.

6th.—Much better. March 12th.—Discharged cured.

Lives, 28, Gue lane, Kensington.

CASE XVIII.—Joseph Catlin, aged ten; admitted May 13th, 1828. A pustule in the centre of the cornea, with great inflammation and discharge of hot tears. Has had a sore eye for three years, but not so bad as it has been for the last week.

R. Hydr. Submur. gr. iv. statim. Inf. Sennæ vespere. Empl. Lyttæ pone aurem. Cucurb. cum ferro ad 3v.

14th.—Inflammation less; the cupping gave great relief; he can open his eye better. Repet' medicamenta.

15th.—Improving.

Hydr. Sub. nocte. Magnes. Sulph. 3 iv. mane. Aqua tepida.

20th.—Cured.

On the 27th, returned, having, as his mother said, caught cold, and relapsed; the inflammation being as bad as at first, the child looking pale and ill.

Apply the Ung. Argent. Nitrat.

29th.—Apply the ointment. Much better.

Returned the 17th June, saying he got well after the last application of the ointment, and has now been bad four days; the inflammation considerable, and the cornea more opaque in the centre than formerly. Apply the ointment.

19th.—Better. 21st.—Repeat. 24th.—Repeat.

July 8th.—Repeat. Pil. Hydr. Subm. gr. iv. Inf. Sennæ.—Unguent. Argent. Niträt.

10th.—Repeat. 16th.—Discharged cured.

Case by Dr. POCKROWSKY.

CASE XIX.—Mary Anne Flood, three years old; admitted 28th June, 1818. Disease of a week standing, but with little or no pain. The iris discoloured and inflamed, but no lymph effused on the edge of the pupil, which is regular, although it seems furred on the surface around it; considerable sclerotic inflammation, with ulcer of the cornea; lymph deposited at the under part of the cornea, forming an onyx.

To be cupped to three ounces from the temple. Hydr. Subm. gr. ij. every two hours. The Ung. Hydr. fort. 3ss. to the forehead daily.—Inf. Sennæ.

29th.—Much relieved by the cupping.

30th.—Better: repeat medicines.

July 1st.—Much better. To continue the pills and the ointment in smaller quantities, although the pills have not been regularly given.

5th.—Omit the medicines, the internal inflammation having subsided. The mouth has not been sore, but the child is weakened, and looks pale.

17th.—Quite well, with the exception of a very slight speck.

Case by Mr. CAVIE.

CASE XX.—Charles Campion, twenty-one years old; admitted February 7th, 1828. Sclerotic inflammation.

To be cupped on the temple to twenty ounces. Hydr. Subm. gr. vj. Magnes. Sulph. 3j. each night.

10th.—A great deal better. Repeat the pills and salts.

12th.—The inflammation is now more confined to the tunica conjunctiva; the tears run hot, and there is intolerance of light.

The Unguent. Argent. Nitr. to be applied.—Pulv. Jalap. C. ʒiss.

14th.—Much better. The ointment and powder continued to the 14th March, when he was discharged cured.

Case by Mr. BELL.

CASE XXI.—William Malhuish, aged twenty-two; admitted September 16th, 1828. Had a chancre five months ago, which was cured under a course of mercury. The eye has been bad a month: has had lotions applied, and mercury given, which he has only left off taking ten days; the mouth is yet sore. Has had eruptions all over his body. No pain in the eye, but some in the forehead; dull red sclerotic inflammation; pupil irregular, and larger than natural. Mr. Guthrie said this was a return of inflammation in the vessels of the sclerotica and iris, from weakness, on the application of cold.

The Unguent. Argent. Niträt.

18th.—Better: repeat. 20th.—Repeat.

23d.—Very much better; the pupil more regular, and diminished in size; lymph going.

25th.—Nearly well. 27th.—Cured. Case by Mr. TAYLOR.

CASE XXII.—William M'Owen, aged twenty-four; admitted May 15th, 1828, with inflammation of the iris of the left eye, of a low kind; little or no pain; pupil irregular; no lymph thrown out; a dark coloured zone of vessels around the cornea.

The Ung. Argent. Nitrat. applied. Six grains of the Submuriate of Mercury at night, and one ounce of Sulphate of Magnesia in the morning.

17th and 20th.—Repeated.

22d.—Pulv. Jalapæ C. ʒi. Solutio Belladonnæ, the inflammation having subsided.

25th, 28th.—Repeat.

June 3d.—The right is affected in a similar manner: sclerotic inflammation, loss of transparency of the cornea, the pupil irregular, vision diminished, the iris discoloured.

Ungent. Argent. Nitrat. alone, to ascertain its effect.

5th.—The whole complaint is better, the inflammation being very much diminished, the cornea clearer; the pupil still irregular; vision the same.

Repeat the ointment.

7th.—Says he was better yesterday than this day, but is still better than on the 5th.

Repeat the ointment.

10th.—A slight irregularity of the pupil is the only remaining appearance of disease.

Apply the Solutio Belladonnæ.

On the 19th July, one month from his discharge, he returned with the following symptoms: There is a zone of red vessels around the cornea, which is muddy, or has lost its transparency; the iris is discoloured, and red vessels may be easily seen running upon it; the pupil is contracted, irregular, and a network of lymph may be seen behind it. The spots of lymph, of a reddish colour, and of the size of pins' heads, have been effused at the under and outer margin of the iris. Little intolerance of light; pain in the forehead and side of the head, increased at night; is covered with lichen syphilitica. Says he had never had sores on the penis, but had a discharge for a few days six months ago.

R. Hydrarg. Submur. gr. iij.; Ext. Opii gr. ʒ, fiat pilula, tertia quaque hora sumenda.

21st.—Repeat. 23d.—Inflammation subsiding.

24th.—Mouth sore: repeat Hydr. Subm. and apply Belladonna.

26th.—Mouth very sore: omit medicine.

27th.—The Belladonna to be applied every day. The disease nearly gone, the irregularity of pupil only remaining in a trifling degree; the lichen syphilitica disappearing also.

CASE XXIII.—James Heavy, aged twenty-six; admitted May 6th, 1828; says he cannot see out of his right eye; thinks he lost the sight of it from sleeping in a house which was then being painted, in November last; no pain, no inflammation. Attended an hospital two months without benefit; he then applied to a gentleman conversant in the ophthalmogistic art, who told him nothing could be done for him; he then came here. Is a stout healthy man, of a sanguineous temperament.

To be bled from the jugular vein to sixteen ounces.—Pil. Calomel gr. vj. nocte. Magnes. Sulph. ʒi. mane.

10th.—To be bled from the arm to twelve ounces.

Repeat pill and salts.

12th.—Repeat pill and salts. 15th.—Repeat.

17th, 20th.—Can now see at intervals.

To be cupped to twelve ounces; to take two grains of Calomel every night, and half an ounce of Sulphate of Magnesia in the morning.

24th.—To be cupped again to sixteen ounces, the last cupping having done good.

27th.—Empl. Lyttæ tempor. Repetantur Pil. et Magn. Sulph.

29th.—Rep. Pil. et Magnes. Sulph. 31st.—Repeat.

June 5th.—Has nearly recovered his sight.

12th.—Does not attend regularly, but, when he does come, gets his pill and salts.

July 8th.—Cupped to sixteen ounces.

11th.—Repeat the cupping. 16th.—As well as usual.

August 14th.—Has absented himself for some time, and has returned not so well.

To be cupped to sixteen ounces on the temple.

19th.—Empl. Lyttæ to the neck. Pulv. Jalap. C. ʒiiss. statim.

20th.—The powder to be repeated every second day.

28th.—To be cupped to twelve ounces.

September 2d.—Can now see very well, although not quite as well as with the other eye.

Sp. Rosmar occasionally, and Pulv. Jalapæ C.

DELIRIUM TREMENS.

Observations on Delirium Tremens. By JOHN SMITH, Esq.

Read at the Westminster Medical Society.

It has generally been noticed that this disease attacks persons who have been addicted to excessive drinking, either malt or spirituous liquors; nor do I think there is a case on record in which the *true symptoms* of delirium tremens existed, that might not be traced to some excess of this description. It might be presumed, however, that in some peculiar constitutions this morbid disposition might be induced by a comparatively trifling irregularity; though I doubt whether it has ever been found to occur in a truly abstemious habit.

When an individual has once ruined a good constitution by drinking, I think we are justified in looking upon him as predisposed to this disease, although, perhaps, the exciting cause for the time be withdrawn. A justly esteemed author, on this subject, says, that "when habits of intemperance, especially in the use of spirits, are once established, it is very difficult to break away from such indulgences;" and he gives as an example the case of a lady, who was attacked with a train of symptoms very similar to delirium tremens. On questioning her friends privately as to the probability of her being in the habit of enjoying the pleasures of the bottle, the idea was laughed at; but, during her illness, a large bottle of the compound tincture of lavender was found in a drawer, with a liqueur glass, stained with the tincture, by the side of it; which at once proved that the habit had gone far beyond the observations of the family.

As an additional testimony in support of the opinion that this disease occurs particularly to those in the habit of drinking spirits, may be adduced the frequent occurrence of it in particular parts of the coast, where smuggling is carried on to great extent, and ardent spirit obtained at a comparatively low price. It is also extremely prevalent in some parts of America, where spirit may be had equally cheap.

It is, I believe, a generally received opinion among those who have written on this disease, that it depends upon a peculiar state, or affection, of the sensorium commune; but in what particular state, or affection, they do not sufficiently explain. Nor do I believe it to be an enigma very easily solved, as the symptoms during life are sometimes excessively perplexing, and the post-mortem examinations reveal but little, and that little very often extremely unsatisfactory.

I recollect the post-mortem examination of a sailor at Deptford, who was supposed to have died of delirium tremens. After a very careful and minute examination of the head, the morbid appearances found were slight opacity of the tunica arachnoides, an increased exudation between it and the pia mater, and a larger quantity than natural in the lateral ventricles. But I am convinced I have seen these morbid appearances repeatedly in the heads of individuals who have been accidentally killed, and who, had it not been for the accident, would probably have lived for years.

It not unfrequently happens, according to Dr. SUTTON, that this disease is followed and complicated with symptoms of apoplexy, paralysis, coma, and mania; which he considers presumptive proofs that this disease may, in its fatal termination, be connected with some of those consequences which

attend other affections of the head, and would not, in examination after death, be surprised to find water between the membranes, and turgescence of the veins of the head; though this opinion may claim our particular attention, it would, perhaps, have been more satisfactory had he adduced cases in justification of it.

It has been stated that this is a disease depending on a peculiar state of the animal system, brought on by excessive indulgence in spirituous or other exciting liquors.

As far as I have been able to judge, the symptoms seldom or never commence while the patient is in the daily habit of swallowing the poisonous draught, but that they occur more especially when the excitement is discontinued. In three cases which have come under my own immediate observation, and in others which I have collected, I find that the first development of the attack generally took place when the usual stimulating liquid had been left off, either from the individual's not possessing therewith to purchase it, or it had been discontinued from slight ailment or accident; which last occurrence is sometimes the cause of this delirium being mistaken for that very peculiar condition of the nervous system which occasionally follows very severe injuries, and has therefore received the name of "*Delirium Tramaticum*."

The following are the symptoms which I have generally found to precede an attack of *delirium tremens*: We will suppose the person to be in the habit of drinking daily some considerable quantity of stimulating and intoxicating liquid: for a few days after a greater excess than usual, he complains of a sense of depression or sinking at the pit of the stomach; he loses his appetite and relish for food, which he justly attributes to indigestion arising from irregularity; he accordingly refrains from it altogether, and perhaps takes opening medicine, and lives low. For the next day or two, these symptoms increase, the fluttering and depression become excessive, and his friends notice his manner to be more nervous and irritable. These symptoms are succeeded by wanderings in intellect, peculiarities in behaviour, and restless nights. The tremor, so characteristic of the disease, becomes very manifest; the bowels, if open, become costive, and the secretions of the body generally altered. If sleep has continued up to this time, it is now banished, and the delirium, particularly at night, becomes furious.*

* From the following case, it appears that the brain may be almost immediately affected by the speedy absorption of spirituous liquors. We give the extract from Dr. COOKE's work on *Nervous Disorders*, vol. i. page 221.

"I am informed by Mr. Carlisle, that a few years since a man was brought

These I have mentioned as some of the most prominent symptoms. I have refrained from alluding to the pulse and tongue in the first stages, as I have, in my small experience, found them to vary considerably in different cases.

With respect to the resemblance of this disease to idiopathic phrenitis, which some authors and many others have contended for, it may be observed that this is likewise an idiopathic disease, commencing with very little previous fever, and the delirium attended with much wandering irritability, restlessness, and exertion.

In these symptoms, the diseases are certainly somewhat similar: but in phrenitis you have great intolerance of light, pain in the head, a dry and furred tongue, hot skin, flushed countenance, and suffused eye.

Now, in delirium tremens there is no very great intolerance of light, though its stimulus may serve to keep up the excitement. There is a constant tremor, which is not a necessary attendant on phrenitis, but is even looked upon as something accidental when it does occur. The tongue is generally moist, though I have seen it occasionally white and furred in the centre; and sweating is a constant attendant on delirium tremens, but is wanting in phrenitis; or, if it be present, it is considered a very favorable symptom.

It has been noticed that this disease has sometimes been mistaken for mania. If I might be allowed to offer an opinion, I should say that it more nearly resembled this state of the nervous system than any other that I am acquainted with; but still there are circumstances which cannot fail to mark a difference between the two, and I shall mention in particular the species of delirium.

Maniacs are generally delirious on some peculiar topic, and their whole conversation is directed towards that point; and, during their paroxysms, nothing I am aware of will pacify them. But, in delirium tremens, the delirium is not confined to one subject, but about a variety of things which may have happened lately in their private affairs; and one grand characteristic distinction is, that they know perfectly well what

dead into the Westminster Hospital, who had just drank a quart of gin for a wager. The evidences of death being quite conclusive, he was immediately examined; and within the lateral ventricles of the brain was found a considerable quantity of a limpid fluid distinctly impregnated with gin, both to the sense of smell and taste, and even to the test of inflammability. The liquid (says Mr. Carlisle,) appeared to the senses of the examining students as strong as one third gin to two thirds water."—This case is, of course, not introduced as one of delirium tremens. The fact mentioned, and so well authenticated, is interesting in relation to the occasional effects that may arise from excessive spirituous potations.—EDITORS.

is passing around them : so much so, as at times to be able to distinguish their friends from strangers.

In addition, the recollection of that which has immediately happened appears to be effaced on recovery, and their illness appears to them like a dream.

Having thus far, then, traced the history, (I own in a very cursory and imperfect manner,) I shall now proceed to the treatment of the disease, which I take to be not only the most interesting part, and calculated to excite a lively interest, but also fraught with considerable importance; especially to the young practitioner, who is bound to steer between modes of practice so diametrically opposite in their nature, and attended, as far as I have been able to judge, with very different results.

I shall consider separately the various and most essential modes of treatment which have been recommended, and illustrate them, as much as lies in my power, with reference to established facts and cases. To commence with the antiphlogistic treatment.

It is sufficiently evident, from the numberless cases which we meet with recorded in all the different periodicals of the time, that this disease has been, and still is, frequently attempted to be cured by those methods which are commonly resorted to in the most serious and alarming diseases of the head.

They have but one common object, which is to remove the cause on which it has been at different periods supposed to depend: viz. turgescence of the venous system, increased action in the arterial system, effusion, or extravasation. How far these opinions are correct, it will be our particular object to determine.

It is needless to mention that the usual means adopted to counteract these supposed evils, by the followers of the antiphlogistic system, have been bloodletting (both general and topical), blistering, and purging. I shall offer a few remarks upon the efficacy of these measures, as far as delirium tremens is concerned; then pass on to the consideration of general and diffusible stimuli; and, lastly, to that of opium.

In some cases of this disease, the symptoms would appear to be ushered in with an uncommon degree of excitement, quite sufficient to mislead a young practitioner, and induce him to bleed largely and repeatedly; especially when he observes his bloodlettings followed by what appears to him to be temporary relief, but which would be known to an individual of experience to be a fallacy, and the forerunner of a de-

pression, which is frightful in its appearance, and often most alarming in its consequences.

I will relate the particulars of a case which fell under my own observation a short time back.

I was requested by a surgeon, (and a surgeon to an hospital, a man of very considerable practice,) to go to bleed a man. The patient was a publican, a man who, his friends allowed, had been in the habit of drinking two or three quarts of porter, with half a pint to a pint of spirit, daily. He had been delirious three days, occasionally furious, and had been bled, by order of the surgeon, twice before. When I saw him, he was sitting up in bed, with two or three persons to prevent him from getting out. He was bathed in perspiration; had a rapid, but small pulse; a moist tongue; constant tremor and delirium. I immediately proceeded to bleed him, which he allowed me to do without resistance. I took, according to my directions, sixteen ounces. I was sorry I neglected to count the pulse previous to the bleeding; but immediately afterwards it became so rapid that, after repeated attempts, I was unable to do so. After waiting ten minutes or so, I left him, and was rather astonished to hear the next morning that the patient was dead, and that the fatal event took place exactly three hours from the bleeding. The nurse in attendance told me that, after I left him, they laid him down on the pillow; he remained very quiet, in fact, they thought he was passing off to sleep; in consequence of which, they did not disturb him for two hours, at which time they found him gasping for breath, and he died without uttering a syllable.

The case has made such an impression on my memory, I can never forget it. I cannot help thinking, from subsequent observation, that this was a confirmed case of delirium tremens, and that he would probably have recovered had it been treated in a different manner.

I shall now consider what further has been said on the treatment of bloodletting. If the patient be of a strong plethoric habit, who is liable to determination of blood, and has pain in the head, a suffused eye, a quick and full pulse, and loaded tongue,—in fact, symptoms showing that the case is complicated with apoplexy,—there can be no doubt of the propriety of withdrawing blood, and that directly. But serious deliberation will be demanded before another copious abstraction of blood is made. This I consider, however, an extreme case; such are not the general symptoms of delirium tremens. On the contrary, you find the disease ushered in

with a quick but small pulse; no pain in the head, but rather a sense of lightness; no suffusion of the eye; but a moist tongue, and such a general state of excitement and tremor that even a trifling bleeding would frequently throw the patient into the greatest state of depression.

The following passage is taken from Dr. SUTTON's pamphlet on this subject: "When bloodletting has been employed, and principally relied on, I have observed a fatal termination of the disease in almost every case, though the indication, as to habit, for its use appeared strong and decisive. And I have witnessed the cases of this disease to be always, on this account, the most rapidly fatal in robust and plethoric persons, where bloodletting was most used, without the aid of opium."

From the foregoing observations, and the opinions of men who have had considerable experience in this peculiar disease, I cannot think that bloodletting is a practice imperatively called for; but at the same time we must allow that its use occasionally paves the way for the exhibition, and materially assists the action of other remedies.

With respect to blisters, from the little experience I have had, instead of being of service, I should say they were decidedly injurious, and serve to keep up an irritation in the system, which we are, by every means in our power, endeavouring to lessen.

As to purgatives, I conceive the exhibition of them can never be looked upon as a cure for the disease; though the timely use of them will serve two good ends, viz. to clear out the bowels from any irritating contents, and aid the effects of other remedies.

With regard to the use of cordials and diffusible stimuli, such as brandy, ammonia, wine, turpentine, &c. I have seen very few cases in which they have been alone relied on. It would appear, however, that the peculiar condition of the nervous system which follows compound fractures and other severe accidents, and in cases of erysipelas of the head especially, which have been treated in the acute form by very decided antiphlogistic means, are, in the stage of the scaling, liable to a train of symptoms very much resembling those of delirium tremens, and are much benefited by the exhibition of cordials and stimuli, particularly that of opium: several instances of which have lately occurred at St. George's Hospital, and tend much to confirm this opinion.

I shall now speak more directly of opium; and I do so with considerable pleasure, as I have at this moment the notes of two severe cases successfully treated by its free exhibition.

It cannot be anticipated that a disease so seriously connected with the general functions of the brain, should be universally conducted to a favorable termination; but it must afford infinite pleasure to an individual who feels interested in his profession, when he finds the patients of the present day, who are afflicted with this most peculiar disease, recover in the majority of ten in twelve, under the free administration of this most useful remedy.

In the consideration of opium there are several points which present themselves for our observation: viz. the proper time, the mode of administering it, and the relative or proportionate dose.

With due submission, I beg to make the following remarks: Conceiving it to be a pretty well established fact, that, if the patient once falls into a profound sleep, there is a very great chance, almost amounting to a certainty, that he will recover, or at all events be very much benefited; I say, if this opinion be correct, and accords with the general experience, the exhibition of opium is determined on, and it only remains for the severity of the symptoms, and the state and condition of the patient, to be considered.

A question, however, arises as to the proper time for giving opium, and the proportion or dose, and the best form of this remedy. Some practitioners have argued it should be given immediately the symptoms of delirium are discovered, and in large and frequently repeated doses, till the desired effect is produced.

I am certain that the system in this condition will bear a much greater quantity of opium with impunity, than it will under other circumstances or in health; but, at the same time, the practitioner should be very firm in his opinion before he ventures to pour in dose after dose of a drug so energetic in its action. At all events, this observation should have some weight in laying a restraint upon its use in any other circumstances than those of strong and decided proofs of the existence of the disorder.

The following are extracts from my notes of two interesting cases that have lately occurred in the practice of St. George's Hospital.

CASE I.—John Sivier, æt. thirty-five, assistant to a wholesale brewer; of a naturally good constitution, though of late impaired by excessive drinking, principally malt liquor.

September 18th.—Complains of acute pain in the lower part of the abdomen and region of the bladder, coming on in paroxysms, and extending along the urethra to the glans penis; there is incapability of voiding his water, though he is constantly making

efforts so to do; pulse ninety-six, and full; bowels confined; tongue furred; skin hot; no pain in head, or sense of shiverings. A full-sized catheter was introduced without the least difficulty, and about ten ounces of very high-coloured urine withdrawn.

Hirudines xv. reg. vesicæ.—Hydr. Subm. gr. vj.; Antim. gr. iij. statim.

Haust. Sennæ post horas sex.

19th.—On the whole, better. Medicines have acted freely on the bowels; and he has voided urine in small quantities during the night, which is still high coloured, but no apparent admixture of blood.

Haust. Salin ʒiss.; Magn. Sulph. ʒi.; Vin. Ant. Tart. m.xx. quartis horis.

20th.—On visiting him this morning, a different set of symptoms presented themselves. His wife states that during the night he gradually became restless and wandering; towards morning, quite delirious, talking incoherently, and requiring the assistance of two or three persons to keep him in bed. At present he lies with his eyes wide open, accompanied by a maniacal wildness; there is constant motion of the head and arms, and if asked to give his hand, he does so with a convulsive effort; many of the muscles, especially those of the forearm, are in firm contraction, and there is universal tremor of the whole body; pulse 100, small; bowels open; tongue moist and white; no acknowledgment to pain in the head, but answers quickly that it is a sense of lightness, and wanders to another subject. On questioning his wife, she said that for two or three years he had been in the habit of drinking a great deal of malt liquor, but for the last week or fortnight has taken little or nothing, on account of the pains which he suffered in the situation of his bladder. Complained very much, yesterday afternoon, of beating of the heart, fluttering, and oppression about the præcordia, previous to the commencement of the delirium.

Hyd. Subm. gr. v. statim. Pil. Opii gr. i. secundis horis. Mitte xij.

21st.—Has passed a very restless and bad night. The general symptoms, on the whole, are much aggravated; pulse 120, very small; perspiration profuse; nervous excitement and irritability excessive.

Pil. Opii gr. i. omni hora. Injectio Amyli cum Tr. Opii m. xxx.—Mitte viij.

Vespere.—Excitement and tremor have continued during the day, without intermission. He has taken the pills regularly, but there has been no disposition to sleep.

Pil. Opii gr. ij. omni hora, mitte iij.

22d.—Having passed another night equally bad with the preceding in respect to delirium, he was brought into the hospital, and placed under the care of Dr. HEWETT.

Rep. Injectio cum Tr. Opii ʒi. Sumat Liq. Opii Sedativ. ʒss. statim et repetet m. xx. per quatuor vices.—Beef tea, &c.

Vespere.—Began to dose this afternoon about four o'clock, and

is at present fast asleep. The twitching of the muscles continues, but is much less. Took altogether thirty-five grains of opium and one drachm and a half of Liq. Opii Sed.

23d.—Has slept nearly all night, and is now quite rational and collected; still some twitching and spasmodic action of the muscles, particularly those of the forearm; pulse eighty, very soft; tongue moist, a little coated; has no pain in the head. Says that he has had two similar attacks before, and was in the hospital two years ago.

Sumat Tr. Opii m. x.; Sp. Æth. C. 3 ss.; Mist. Camph. ʒss. M. sextis horis.—Porter ʒss. bi die; beef-tea, &c.

25th.—Is much better; sleeps well. Perstat.

29th.—Has progressively improved since last report, and appears in all respects well. Omit omnia.

October 6th.—Discharged cured.

CASE II.—H. D., ætatis thirty-three, foreman to an extensive coach manufactory; of a stout athletic figure, and a man who has been accustomed to drink freely during his hours of work, especially ale early in the morning. Was brought to the hospital about four o'clock in the afternoon of the 19th of October. His friends give the following history of his illness:

About a fortnight ago he first complained of pains in his stomach and bowels, which he was persuaded arose from drinking so much malt liquor; he accordingly abstained from it altogether, and took nothing but food of a farinaceous description and water. After a few days, his sisters noticed his manner to have become more nervous and irritable than usual; and, on the night of the 16th, without any apparent cause or complaining of pain in his head, became rambling in his intellects, and during the night quite delirious. A medical gentleman was called in, who looked upon the case as one of phrenitis, and therefore bled him, by means of cupping, to thirty ounces, which produced fainting for half an hour; gave him a dose of calomel and an aperient draught; and directed, after its operation, to take six grains of the Pil. Hydrarg. every eight hours. The symptoms during the day somewhat lessened, and he slept for two hours; after which he was quite rational, but in the course of the night became as delirious as ever. The same gentleman saw him, and took away thirty ounces of blood from the arm, which again induced fainting for half an hour. He was then directed to take twelve grains of the Pilula Hydrargyri every eight hours; of which altogether he has taken one drachm.

October 19th, four P.M.—we first saw him: he was then sitting in a chair in the ward, with his hat on, in a most unconcerned manner. The symptoms that attracted our particular attention were, the peculiar wildness of the eyes, the great nervous excitability, universal tremor, amazing irritability of a small pulse, moist tongue; absence of acknowledgment to pain in the head or elsewhere; constant talking, though evidently incoherent; and

the rapidity with which all the motions of the body were performed. The foregoing symptoms, combined with the account of the man having been a free drinker, were in favor of its being a case of delirium tremens, rather than one of phrenitis requiring further depletion. In the evening, the delirium and tremor becoming more decided, it was judged prudent to confine him in a waistcoat.

He was directed to take Tr. Opii ʒss.; Mist. Æth. ʒss. statim. Tr. Opii ʒi.; H. Piment. secundis horis.

Twelve P.M.—For the last hour, the delirium has been excessively furious; he is almost unmanageable; continually struggling and vociferating. He has taken two doses of the mixture, but cannot be persuaded to take any more at present. He lies in a profuse perspiration; lips and tongue dry; pulse quick and small, not easily counted, (perhaps 140;) has neither passed water nor motion since admission. The peculiarity of the delirium in these cases, so often noticed, that, even in the most furious paroxysms, they know perfectly well what is passing around, was perhaps never more strongly marked than in this case.

Towards morning he took Tr. Opii ʒss.; Mist. Ætheris ʒiss.

October 20th, eleven A.M.—The delirium and tremor continue, but are less violent. About an hour ago, he allowed the nurses, with the assistance of two or three men, to change his waistcoat and shirt, which was irritating a blister at the back of the neck, applied previous to admission. He was afterwards removed to a fresh bed; his tottering, uncertain step was particularly noticed. Having been seen by Dr. Young, he was directed to take ʒss. of the Tinct. Opii every two hours in Mist. Camph. He has passed plenty of water in the bed.

Six P.M.—The delirium still continuing, he was removed to a lower apartment of the hospital, being fearful he might again disturb the ward during the night. He has taken two more doses of his mixture, making in the whole four drachms two scruples of the Tinctura Opii taken since his admission.

Eleven P.M.—He has been very quiet since his removal, and began to doze, for the first time since the 18th, about eight o'clock this evening, and is now fast asleep. Bowels have not acted since admission; pulse 110 and small, counted during sleep. The nurse was directed, if he should wake up within an hour, be uneasy, or noisy, to repeat a dose of his mixture; if not, to discontinue it altogether.

21st, nine A.M.—Has slept nearly the whole night, at intervals waking up, asking for drink, then subsiding again quietly to sleep. Altogether there is a very marked change. He has passed plenty of water, and bowels have been open once; there is still slight tremor, but he is wonderfully better.—Haust. Sennæ.

Two P.M.—Has slept a good deal during the day, and is in every respect going on well. He is now perfectly sensible, and, when told about his late behaviour, listens with much concern, and hopes he has done no mischief; says that he recollects coming to

the hospital, but nothing of the circumstances that have taken place since. Pulse 120, very small; tongue rather coated in the centre, and dry. The draught has acted freely on the bowels.

Sumat Tinct. Opii ʒss.; Sp. Æth. C. ʒss.; Mist. Camph. ʒss. M. quartis horis sum.—Beef-tea, &c.

October 22d.—In all respects improving: was rather restless in the middle of the night, but altogether slept well. The waistcoat has been taken off, and he has been removed into the ward. There is still a slight tremulous motion of the forearm, but it has nearly subsided. There is a peculiar fetor about him, which may be attributed to the mercury, his gums being slightly affected. Bowels open; tongue moist, and less furred; pulse 104, small and feeble. Only complaint is his hands, which are chafed and swollen, from the bandages of the waistcoat.

Cont^l medic. heri pres.

23d.—Going on favorably: intellect perfect; countenance natural; bowels open once; tongue rather dry; pulse 100, more steady. Takes beef-tea, and the mixture every eight hours.

26th.—He got up yesterday morning for the first time, and remained up for some time; after which, it was thought that his manner was rather more hurried, but he passed a good night, and this morning appears better. Bowels open; pulse ninety-six, steady and full; tongue moist and clean.

29th.—Has progressively improved since last report; can hold his hand perfectly steady, and is, in fact, quite well. Wishes to go to Brighton to recruit his health, previous to commencing his usual occupations.

30th.—Discharged cured.

In the recital of these cases, I have purposely refrained from making any remarks, as it might deprive them of their interest; but I think the utility of the opium must be very evident.

There are a few questions upon which I much wish for satisfactory information. Does bleeding increase the delirium in these cases? Does it lessen the quantity of opium necessary for its cure? What is the best form of giving opium: in the way of tincture, the gum, or the liq. opii sedativus? and what is the result of experience with respect to the exhibition of suppositories? I understand it is M. DUPUYTREN's opinion that a small quantity of opium administered per anum is generally more powerful in its effects over the system than the same, or even a larger, quantity given by the stomach. His reasons are, that the opium undergoes no change in the rectum as to its actual composition; whereas, in the stomach, it is very soon altered, to a certain degree, by the gastric juice, and the other substances contained therein. I conceive this to be a point worthy consideration, and, if it be true, one of great practical importance.

I certainly do think, as far as my experience goes, that the use of suppositories is very frequently neglected in this country; whereas, it is found of very great service, and in general use, on various parts of the continent.

LITHOTOMY.

Lithotomy performed twice in three days on the same Patient, by
M. DUPUYTREN. FROM A CORRESPONDENT AT PARIS.

ON the 17th November, an old man was brought into the theatre of the Hôtel Dieu, for the extraction of a calculus, which was followed by one of those disastrous results that occasionally fall to the lot of the most eminent practitioners. The subject of this notice did not, indeed, die *under* the knife; though, after long protracted but judicious efforts on the part of M. Dupuytren, the stone remained the first day immovably fixed in the bladder. On the third day, a second and successful attempt was made to extract the stone by the recto-vesical method; but the unfortunate patient expired in the course of the night.

Few cases offer more points of instruction to the practitioner than this. The cause of the difficulty was not obscure, but, as it frequently happens, was not detected till it was too late to be remedied the first day; since the patient's state made it then necessary to remove him to his bed, and to defer all further measures to a future day, if he should indeed survive the consequences of the violent irritation and torture which he had already undergone.

It seems hardly necessary to suggest that the only impediment to the exit of a stone, under the hands of so distinguished an operator as M. Dupuytren, must have arisen solely from its extraordinary bulk, and the want of proportionate space for its exit. It will be found, however, that the judgment of the surgeon in the adoption of his method on this occasion, was not altogether free from blame. The size of the stone had been previously ascertained by the introduction of a finger into the rectum, and the application of the hand to the hypogastric region. These were separated by a resisting body for the space of two inches and a half, so that the larger diameter of the stone, and perhaps the smaller one, equalled the usual distance between the tuberosities of the ischia, which is the largest opening through which the stone could be extracted. By a sort of fatality, however, the diverging of the two bones in this patient was less than usual.

The entrance of the staff into the bladder was obstructed by a sonorous body impacted in the neck of this viscus. The

sound, on percussion, was audible in the back seats of the theatre; and so completely did the stone fill the cavity of the bladder, that not a particle of urine was retained, and a urinal was constantly worn to receive it *guttatim*. The patient complained of uneasiness in the kidneys, of considerable pain in the bladder, which extended to the glans, where the usual sensation of itching was felt. The disease had, in its present form, existed for ten years; and had been preceded by the discharge of gravel, and occasionally small calculi, through the urethra. At length one became impacted, was broken, and removed with considerable pain. When the gravel ceased to be discharged, the calculus began to form; a fact which M. Dupuytren noted as one of constant occurrence, and the cause of which may be readily conceived.

It was obvious that no ordinary incision could liberate a stone of such magnitude, and the space under the arch of the pubis was evidently not sufficient. The lateral operation was therefore out of the question; and the unnatural approximation of the tuberosities of the ischia in this subject was not very favorable to the recto-vesical incision. Yet this, or the hypogastric, was the method peculiarly called for under similar circumstances, and no alternative remained but to choose between them.

The expediency of lithotritic was cursorily discussed; but, as the principal impediments to success, a stone of considerable size and an irritable and contracted bladder, existed, the negative was immediately pronounced. The difficulty of grasping the calculus by the *litholabe* would have been insurmountable; and, were it otherwise, the numerous operations that would be requisite for the complete perforation and destruction of such a stone would alone have been sufficient to cause its rejection.

Although an incision above the pubes affords an easy exit for the stone, yet this method is frequently followed by infiltration of urine into the cellular membrane interposed between the abdominal muscles, and thus causes peritoneal inflammation, gangrene, and death. Besides, an impediment might arise from the state of the bladder in this patient: for the extreme, nay invincible, difficulties which have been sometimes experienced in endeavouring to distend a cartilaginous bladder, so as to make it rise above the pubes, might occur in this case; for a bladder, thus diseased and irritable, would not yield in the slightest degree, and the agony of the patient must compel the surgeon to abandon the attempt. A staff is generally introduced to carry the bladder above the pubes; but here it could not pass at the anterior part, and it

became necessary to use one of small size, and slightly curved for the space of an inch at its extremity, for the purpose of passing beyond the stone, and of conducting the knife during the operation that was ultimately chosen.

But is the recto-vesical method free from objection and danger? Not altogether. It is followed occasionally by inflammation of the cellular membrane within the pelvis, and sometimes by recto-vesical fistulæ. The mucous membrane of the rectum, unaccustomed to the irritation of urine, might become inflamed by contact with it. The vas deferens is liable to be injured. "But how," says M. D. "can these disadvantages be compared with the dangers of the hypogastric operation, which some are disposed to recommend at the present day, and which nevertheless has been abandoned. It is an undoubted fact that, as often as surgeons have thought proper to renew the attempt, more patients fall victims to the hypogastric than to the perineal incision."

On a balance of evils, M. D. inclined to the recto-vesical method. If fistulæ should occur, he conceived it would be less disastrous than peritonitis; nor would the inflammation of the cellular membrane within the pelvis be so likely to occur as that of the peritoneum.

Nothing could be more judicious than this reasoning; and, though the concluding sentence of an excellent clinical lecture had but just escaped from the lips of M. Dupuytren as the patient was placed upon the table, and prepared for the operation, yet in this short interval an unlucky train of thought, it seems, subverted this decision, and induced him to do that which for three quarters of an hour he had shown to be in the present case objectionable.

The bilateral operation was performed, which differs from that originally proposed only in the *external incision*! This was made perpendicularly in the raphe down to the anus, and the double-bladed bistouri caché was used to divide the bladder and prostate on both sides.

The incisions being lateral instead of posterior, it became impossible to draw the stone in a direction perpendicular to the axis of the pelvis. After long-continued efforts and occasional repose for deliberation, it was found that the stone was unlikely to move; and it became a question whether recourse should be had to the hypogastric operation or to the recto-vesical, or whether the stone should be broken in situ, not by lithotritic, but by mechanical power, which from time immemorial has been recommended in all cases where the stone has been too large to pass either through the incision or through the natural aperture of the pelvis. However, it

was deemed advisable to defer all other proceedings at present, and the patient was conveyed back to his bed, in a situation which has been recommended in all cases by those surgeons who, like DESCHAMPS, advise dividing the operation into two distinct periods; a measure, in truth, absurd, and which nothing but unforeseen and pressing events can justify.

The state of the patient, at the close of this calamitous event, was not unlike that of a child operated upon by FRANCO in the middle of the sixteenth century, and to which we are indebted for the high operation. Had the latter been performed on the present occasion, the resemblance would have been perfect. As the stone in the child had resisted the most persevering efforts for its removal, the surgeon was entreated by the parents to desist, and to abandon the little sufferer to his fate. But, as he states, "*being desirous of avoiding the reproach of having failed,*" (a laudable motive!) he introduced his finger into the rectum, projected the stone above the pubis, and extracted it through an incision made into the bladder. The child recovered, but was extremely ill, and the operator had not sufficient confidence in this method to advise its adoption. It remained forgotten or neglected until about twenty years afterwards, when it was brought into notice by ROUSSET.

M. Dupuytren was evidently distressed at the result; his usual firmness abandoned him, and his countenance betrayed the conflict that was passing within. He immediately explained to those near him the error which he had committed, and on the following morning publicly acknowledged the same to the assembled practitioners and students. How praiseworthy is this candour, and how beneficial to science! How much more do we learn by a cool impartial consideration of occasional errors, than by the ordinary course of unruffled practice. How injurious the notion that the reputation of a man of science can lose from such voluntary disclosures! Can the great and well-merited fame of M. Dupuytren suffer? Certainly not. Enthusiastic as he is in the pursuit of professional knowledge, ever intent upon extending the boundaries of our art, and anxious to relieve the sufferings of humanity, where is the being so malignant or so daring as to utter a word of reprobation, if, in the fluctuating distractions of his mind, in estimating the comparative merits of various methods, his choice should be sometimes erroneous.

On the morning after the operation, no bad symptom had been experienced. The patient had been frequently put into the warm bath, where he remained from one to two hours at a time, according to his feelings. He was twice bled, and

leeches had been applied to the buttocks. As the median incision divides no vessels of importance, no hemorrhagy had taken place; the pulse was rather calm; no shiverings had been experienced; no pain or uneasiness from pressing over the bladder: yet the blood was decidedly buffy, although not to a great depth. It was remarked that the patient experienced less pain in voiding the urine than before the operation.

At the close of the second day, pain was experienced in the left iliac region: fear was entertained that inflammation had seized the cellular membrane within the pelvis. No soreness on pressing the abdomen, to which cataplasms had been applied through the day, excepting during the use of the warm bath.

Third day, symptoms seemed aggravated. He had been at intervals several hours in the warm bath, and leeches had been applied in large numbers. The abdomen was distended with wind, accompanied by constant desire to go to stool. This was supposed to arise from the pressure of the stone on the rectum.

In the evening, the sufferings of the patient were increased. The stone had partly descended into the wound. An incision was made through the sphincter ani, as in the rectovesical operation, and, after some difficulty in getting the forceps to hold it, was at length withdrawn.

About midnight the man died.

DISEASES IN HINDOSTAN.

A Memoir on those Diseases which proved so fatal to our Troops during the Burman War; with a comparative Sketch of their analogous Cases in Hindostan, during a Service of some years.
By JAMES WALSH, Assistant Surgeon 89th Regiment.

MEDICO-TROPICAL investigation has been so ably and luminously exercised by Drs. CHISHOLM, JOHNSON, and several others, that it should not have been ventured upon by me, if the circumstances in which I was placed in Burmah did not afford some peculiar facilities for comparative effect.

Thus guided, therefore, in my examination of ordinary tropical disease, I had but to follow those master minds, who have so successfully traversed that field of inquiry as to leave little for further research. This summary of Burman pathology, exhibiting no small diversity of character, is the result of attentive observation, and, I may be permitted to add, of long, painful, and protracted suffering; having laboured under almost every form of disease, and perhaps every violence of symptom, as endeavoured to be portrayed.

In endeavouring to account for the frightful mortality which occurred during the Burman war, a slight medico-topographical sketch of the country, as well as of the peculiar circumstances to which the force, both naval and military, was exposed, may be considered necessary for the better conception of its nature.

A comparison, also, of the more violent diseases under which our troops suffered, with those of Hither India, whose more prominent symptoms hold some correspondence, may afford, perhaps, further elucidation.

Of the Indian peninsula, and its sources of morbid action, so much has been written, and so ably, that its topography need scarcely be adverted to, unless for comparative effect with the recent seat of war. The diseases of India, *citra*, as well as *extra Gangem*, evince as marked an analogy as their respective localities and parallels of latitude would admit of. Whenever deviations took place from the ordinary course of morbid action, they might, perhaps, with more justice be ascribed to those modifications necessarily arising in a rapid transition from the wholesome diet, comfortable accommodation, vigilant superintendence, and minute attention to their wants, enjoyed by the soldiery when in cantonments in Hindostan; whilst in Burmah there existed a miserable and melancholy reverse.

The river Burrampeetu, from its source in the southern extremity of the Himalayan mountains to its union with the Ganges, or termination in the Megna, would appear to form a more correct line of boundary between India, properly so called, and that portion of Indo-China constituting the Burman empire, as it existed before our territorial acquisitions in that quarter. This line of division with the great Indian Delta, running W. and S.W. somewhat parallel to that mountain chain, extending in the same direction from the Imaus, in unbroken yet diversified continuity, presents nearly the same morbid causes, the same field for investigation, as the Irriwaddy, or great river of Ava. This river rises at no great distance from the former, and pursues a course nearly similar, but at the eastern side of that chain throughout its whole extent, under its subdivisive names of the Assam, Cachar, Tipperah, Aracan, and Kiayn mountains. The Irriwaddy, soon after its arrival in Pegu, sends out many branches, communicating and ramifying in amazing diversity throughout that province, forming a delta and interprovincial navigation much superior in extent to that of the Megna.

These two great rivers, in their relative course, receive numerous streams from the above-mentioned series of mountains,

yet their waters exhibit occasionally a marked difference. That of the Burrampootu, at many points of its course, after standing a certain time, becomes clear, soft, and well tasted, and neither argil, lime, nor mica are found in the deposition; whilst the water of the Irriwaddy, particularly after the commencement of the rains, will have all three, and cannot be thoroughly cleared by subsidence or filtration, generally having a lightish, milky colour. The banks of this river are formed of alluvian strata in very considerable diversity, calcareous earth, pipe clay, and schistose alumina, with a variety of soils deposited in layers according to their respective gravities. The banks of the Burrampootu appear of a more uniform deposition of common earth, and without any trace of petrificative property in its waters; whilst the banks and bed of the Burman river will exhibit for miles little other stony concretion than those formed from the petrification of the various woods of that region, and occasionally met with in masses of some magnitude, the petrification retaining the true fibrous appearance of the original wood, although differing so much in specific gravity and density.

These great deltas, forming diversified alluvion to a vast extent, and covered with wood and jingle in nearly equal density, exhibit considerable uniformity of morbid action; yet a marked deviation has been occasionally manifested in the difference of type and degree of mortality, particularly in dysentery and remittent fever. This modification of disease could not have arisen from the geographical difference merely of a few degrees of latitude or longitude, whilst their respective peculiarities of climate, products, &c. bore a striking analogy. It must, therefore, be sought for in those circumstances alluded to before, to which the expeditionary force was so unfortunately and unseasonably subjected.

The expedition was undertaken at the beginning of the S.W. monsoon, or rainy season: of course, little further could be achieved than the capture and occupation of Rangoon, and afterwards guarding against a coup de main from the numerous parties of the enemy, entrenched at various points and distances, but gradually concentrating about our position.

Divisions and detachments were, now and then,—once, twice, or perhaps three times a week,—ordered into the jungle, either for reconnoissance or attack, during the most tremendous monsoon recollected there, without roads, bridges, or landmarks of any description, to assist or guide them in the almost general inundation pervading the low country.

For the first four months, the troops had not merely to

grope their way, or wade above the hips or knees, for ten or twelve miles, floundering or rolling, perhaps, in the mud and water half the way, but were occasionally obliged to swim; and this frequently without meeting an enemy; but, even when found and driven from his entrenchment, it was discovered to be reoccupied and restocked in two or three days. The same routine of wading, swimming, and attack, was therefore to be repeated, with little other possible results than the rapid diminution of our force by disease or death; a result, indeed, upon which the Burmans were known to contemplate with exulting certainty.

The occupation of the great pagoda (Shoe-dragon), about three miles N. of Rangoon, called for the support of the greater part of the force, in two or more lines, including a large park of artillery nearly in their centre. The troops, principally European, thus stationed, were under the necessity of proceeding to Rangoon, in greater or less numbers, once or twice a day, for their rations, exposed to the alternate deluges of rain and a vertical sun; consequently, subjected in a few hours to sudden and frequent changes of temperature, perhaps from 70 to 76° Fahrenheit to 100 or 120°, when the sun had for some time burst upon them clear and unclouded.

It can require but little divination to foresee the consequences of this state of things. The men sickened in great numbers, notwithstanding all the precautions, regimental or medical, that could be adopted; and at times but few of the officers could be found fully capable of their ordinary duty. At length a medical representation was forwarded, and the services of the public porters and vehicles were directed to be extended, which had been previously confined to the accommodation of one or two corps only.

The seeds of morbid action, thus unsparingly laid, quickly burst forth with great violence: sickness, and a mortality amounting to comparative annihilation, soon took place; the deaths in the 89th sometimes averaging 100 per week, and were exceeded in other corps. The sum total of deaths for the first three months, exclusive of casualties in action, trifling in point of number, must have been upwards of 3000 Europeans, or more than half the force originally despatched.

During this melancholy visitation, the rations of the soldier were poorly calculated to withstand disease, or strengthen a convalescence rather generally precarious and doubtful. The biscuit was frequently rotten, mouldy, and so full of large white maggots and other insects as to be now and then nearly capable of locomotion. The beef and pork often so rancid as

not to be freed by any degree of washing from the offensive stench and numerous animalculæ, in a state of incessant reproduction and decay. The rice also at times damaged and unsound; and the spirit served out (rum or arrack) rather in a state of too great dilution to excite sufficient energy in the soldier, sinking under extreme fatigue, or a low and protracted convalescence.*

The human frame (European) in a tropical climate, particularly in India, is always in a state of such high susceptibility, as to be powerfully acted upon by those morbid causes which are in a state of perpetual action, although modified occasionally into no small diversity of character. The endemic becomes epidemic, often with an increased exasperation of type; or may undergo a total change, and exhibit disease of a varied, or perhaps wholly opposite, description. How else is that rapid transition, occurring in Burmah, to be accounted for, wherein bilious remittent subsided, and was immediately succeeded by rheumatic or intermittent fever, dysentery or cholera, too often to so violent a degree as could not have been expected after the gradual amelioration of those circumstances, so inadequately sketched, yet productive of such terrific results. It is true vegeto-animal miasm may have acquired a more specific agency, and a higher degree of concentration, than it possessed on our arrival, and, of course, act with a virulence proportioned to this increased power, to which that extreme debility and exhaustion must have not a little contributed, which supervened on such a combination of untoward circumstances, and to which the whole force was so perseveringly exposed.

The principal diseases of this period, while military operations were confined to the great delta of Pegu, were remittent, intermittent, and rheumatic fevers, with cholera and dysentery. The two former sometimes alternating, almost always violent, and often fatal: at least such was the general result in those of later occurrence; the rheumatic never so, but rapidly merging into an extremely troublesome chronic state, and rendered particularly obstinate from the existing necessity of frequent exposure to wet, when perhaps under mercurial influence; a necessity becoming every day more imperious, and calling so particularly for individual exertion,

* To the credit of the Madras local government, it should be said, that, as soon as this want of equipment, and its sad effects, were known there, a large supply of every requisite for comfort and the restoration or preservation of health was immediately furnished, and most liberally distributed among the hospitals of its division.

in consequence of the increasing prevalence of illness throughout every part of the force.

The bilious remittent did not always evince an equal degree of violence. In some early cases it soon intermitted, or wholly subsided, without manifesting a high range of excitement, febrile or cerebral, and yielding in a few days to purgatives, pediluvium, saline diaphoretics, and cold applications to the head, with occasional cold affusion, topical and general. But those of later occurrence, or relapsed cases, were attended with different symptoms and results; generally high febrile excitement and sensorial disturbance. In the primary and severe cases of this nature, the head was always affected with excruciating pain, at first in the frontal and temporal regions, and gradually propagated to the occipital and parietal. This was accompanied with a perceptible pulsatory action of the cranial contents, apparently the cause of a feeling of excessive soreness to the touch in its integuments and external surface. The eyes, to a very considerable degree, partook of this excessive disturbance in their immediate neighbourhood and connexions, soon becoming inflamed, painful, protruding, and intolerant of light.

This determination to the head, generally setting in with such rapidity as not to be marked with any obvious premonitory symptoms, can only be attributed to some powerful agent on the animal economy, to the operation of which the variety of predisposing causes glanced at before must materially, although in a varied degree, have contributed. This agent must therefore be looked for in the constitution of the atmosphere, impregnated, to various degrees of concentration and malignity, with vegeto-animal miasm or effluvia, from vegetable and animal matter in a state of putrefaction and decay, to the more perfect evolution or formation of which heat and moisture are indispensable.

The immediate effect of this invisible poison is, I believe, universally admitted to be sedative: hence the cerebral disturbance, and consequent derangement of function, throughout the nervous system. The balance of the circulation is soon broken, of course, and more or less of congestion, local inflammation, or other similar topical affection, is likely to take place, as a natural result of the miasmatic influence, and the violent reaction too often immediately supervening. The healthy balance of the system thus broken, and succeeded by a numerous train of symptoms indicative of extreme irregularity and excitement in some organs, whilst others are struck torpid and rendered incapable of their appropriate function: the speediest means of relief must therefore be had

recourse to, or the animal frame must soon sink under this complicated and overwhelming mischief. The derangement of the sensorial functions is accompanied, or quickly followed, by corresponding efforts on some of the abdominal organs; at least, those connected with the chylopoietic viscera. Derangement and congestion in these would appear to have arisen synchronously with the cerebral, or at least to advance with them *pari passu*, but operating, perhaps, in a different manner. The heart and arterial circulation, at all times easily roused, even by a very trifling or momentary cause, cannot remain long unaffected in this state of general disturbance: hence the violent impetus to the head, and "remora in the portal circle;" the one in a state of inordinate excitement, whilst the chief organ of the latter is in a state of torpor.

The excruciating pain of the head and affection of the eyes, as well as the excessive heat and pain about the præcordia, may thus be accounted for.

The first step, then, in the *methodus medendi* can scarcely be mistaken in this stage of the complaint; and, if the lancet is not most freely, perhaps repeatedly used, the destruction of those organs must be the inevitable result. Bleeding, therefore, *ad deliquium*, as freely and rapidly as possible, in the first few hours of attack or state of violent reaction, must be practised, and, if not attended with an evident diminution, as well as general relief of the more urgent symptoms, be repeated as soon as the absence of syncope and return of excitement would admit of or call for it.

From this view, it must be obvious that the abstraction of blood in the first instance, to as great an extent as possible, can afford us the only chance, at least, of immediately relieving the head and præcordia; and, if this is not procured, all else must be vain. There is no article in the *materia medica* capable of acting with the requisite promptitude. Some may serve as powerful auxiliaries, but their *modus operandi* must be too circuitous to arrest the rapid disorganization, perhaps already begun, or save from destruction organs of vitality so overpowered. This depletion of the system, and reduction of the phlogistic diathesis, will pave the way, and may give time, for the successful operation of other medicines. Cerebral excitement is not only likely to be relieved, and hepatic congestion diminished, but the function of this organ partially renewed, although perhaps rather irregularly, or not with a sanatory effect.

A frequent discharge of bile, more or less vitiated, during the gastric irritability so generally attendant on cases of this

nature, is an invariable accompaniment ; as is also the altered state of the secretions and skin, arising from derangement of this viscus, with perhaps some other morbid action not yet ascertained, sometimes giving to the disease the more marked features of the great western endemic. Hence the necessity for the exhibition of purgatives, and the full and speedy excitement of mercurial action.

The utility of purgatives, so decisively and generally established, is in no case more manifest than in tropical fever. The impetus of blood and congestion in the portal circle must thereby undergo a greater or less diminution, as a necessary consequence of the increased determination to the intestinal canal.

From the peculiar action of mercury on the glandular system, its conjoined and separate use should be carefully followed up, not merely as a beneficial adjuvant in the ordinary course of purgatives, but so as to produce its proper and full impregnation of the system as soon as possible. Whether it might be inferred that the febrile action would subside as the mercurial advanced, from their supposed incompatibility, or whatever its *modus operandi* may be, still the benefits arising from its exhibition are long established and unquestionable.

For the production of these beneficial results, certain circumstances and a certain state of the system must always be held in view. Too high a degree of phlogistic excitement, or its opposite, of great exhaustion, are extremely unfavorable to the action of this medicine on the human frame. Without this action (excited as rapidly as possible), as powerfully auxiliary to bleeding and purgatives, the disorganization of some viscus, and destruction of the patient, must be an almost inevitable and speedy consequence, unless relieved considerably by the prior evacuation.

The first of these circumstances, the phlogistic diathesis, may be supposed enough diminished by the free primary depletion. The second, or state of exhaustion, not likely to occur, unless in protracted cases, must be combated by appropriate stimuli, so as to rouse the absorbents to their requisite action. The consideration, therefore, of these two vital points call for serious discrimination and sound practical acquirement.

In the progress of the disease, some minor articles may also be brought to our assistance, such as cold affusion, if admissible, topically or generally applied, at least cold applications to the head freed from its hair ; saline diaphoretics, sinapisms, pediluvium ; obstinate remains of local affection to be

treated by friction, fomentation, cupping, blisters, &c. On the disappearance of the inflammatory symptoms, and subsidence or remission of febrile excitement, the debility is to be counteracted by a gradual and well-regulated course of tonics and regimen.

When motion is admissible, a change of scene and climate should take place as soon as possible, and those modes of gestation practised which are most agreeable; such as sailing, use of a carriage, equitation, &c. Indeed, on the approach of the complaint, thorough ventilation should not only be carefully attended to, but the removal of the patient to a purer, or even another atmosphere, should, if practicable, take place; as, although remittent fever may have fully formed, he is still exposed to an increased degree of exasperation, if kept within the influence of the exciting cause. This removal must also afford a better chance of favorable action for medicine, and ultimately of convalescence, contrary to the opinion "that the remote causes of fever cease to act as soon as the disease has fully developed itself."*

Emetics, which have been heretofore much used in all febrile cases, are now rather generally rejected, at least in tropical ones, of course are omitted in the series of medicines already enumerated as likely to be injurious in most stages of bilious remittents, whilst the impetus of blood to the head continues undiminished, or when the gastric irritability is excessive. This latter must be increased by the violent straining so likely to occur; as must also the determination to the head, from the same cause; whilst, on the other hand, antimonials given so as to cause a slight nausea, or combined with calomel to produce a specific or febrifuge effect, sometimes assisted advantageously in lowering the high tone of the system. But still antimonials, particularly as emetic, would appear to be rather universally contraindicated in tropical disease, as giving rise frequently to even a considerable degree of spasm, perhaps cholera, after the convulsive straining, so apt to run into excess, and, of course, add to the debility already existing. Saline cathartics, at least in a full dose, were found rather inadmissible, from the apprehension of a similar effect.

* Those conclusions of Dr. JAMES JOHNSON I found to be correctly established in a great number of cases, particularly my own, wherein it was attended with very marked results. A more perfect remission almost immediately taking place on my removal, when labouring under jungle remittent, as also a diminution of the more prominent symptoms, and speedy change of type to the intermittent, which, after considerable irregularity and severity, yielded to cinchona, with purgatives and mercurials: the latter obliged to be had recourse to from some remaining unsubdued hepatic uneasiness.

This did not particularly strike me till pointed out by the late surgeon* of the corps in which I have served some years.

The primary or secondary intermittents of the Pegu delta evinced, at their commencement, nearly the same general characters as are observed in those of Bengal, yet modified in their subsequent progress by miasmal concentration; to which also unsound rations, great exposure, and fatigue, must have powerfully contributed.

After a short time, the periods of intermission might be observed extended or curtailed, and throughout attended with irregularity to such a degree as to confound, more or less, their classification. The transition, also, from one stage to another, or their unequal duration and mixed symptoms, led, in the beginning, to much embarrassment on the part of the practitioner, as well as increased and often protracted suffering to the patient. The accessions or duration of the paroxysms were seldom certain, more frequently changing so abruptly or irregularly as to prevent the recognition of the decided tertian, quartan, or quotidian. Sometimes the disease would, for the space of an interval or two, assume the form of the virulent remittent, with great cerebral disturbance and epigastric or hypochondric uneasiness. Even the more steady intermittents were often marked with a degree of violence not unfrequently defeating every effort of the medical officer.

In the early stages of the more violent and irregular, a course of treatment was followed as similar to that pointed out for the remittent, on its formation, as the train of symptoms, general and local, would admit. Where the system was not much broken down, and that cerebral or other local determination, with pyrexia, still continued, bleeding, both topical and general, should have been practised to as great an extent as the state of the pulse, degree of excitement, and general strength would allow. Mercurials and purgatives were followed up, nearly as pointed out under the head of remittents. When the local determination and disturbance showed any considerable reduction, recourse was had to cold

* Dr. DAUN, a medical officer long resident in India, of profound research and great practical acquirement, whose talents for observation was not more marked and unceasing than its very successful application, wholly unfettered as it was by any preconceived theory or unfounded bias. To him I feel myself strongly called on for my individual acknowledgments, owing, as I do, to his experience and inculcation, not merely my own existence, after repeated attacks of disease, but also the satisfaction of witnessing the benefits resulting from the application of principles so evidently founded on just medical inference and sound logical deduction.

affusions, anodynes, tonics, and corroborants, at the proper periods for their exhibition.

There was occasionally a feeling of intense anxiety and alarm, bordering on terror, so strongly marking the Pegu intermittent, and apparently unconnected, from its peculiarity of sensation, with any existing topical or general excitement, as to call for the exhibition of opiates to a very liberal extent, if not strongly contraindicated.

[To be continued.]

STRICTURES OF THE URETHRA.

Treatment of Strictures of the Urethra. By M. DUPUYTREN.

FROM A CORRESPONDENT.

THE mode of curing strictures of the urethra by confining a large bougie at the anterior part of the obstruction, is still employed with undeviating success in the wards of M. DUPUYTREN and of M. BRESCHET at the Hôtel Dieu. The mere contact, accurately preserved for eight or ten days, often enables a catheter of the largest size to pass freely where the smallest bougie could not previously penetrate.

Although the effect would obviously be more speedy by the use of bougies with conoid extremities, capable of being wedged into the stricture, M. Dupuytren is indifferent to this advantage, from the certain fact that, sooner or later, the obstacle will be overcome without. Yet the tapered point would not only act on a larger surface at one time, but be less liable to displacement.

The bougies thus introduced are provided with four very narrow tapes or strings, whereby they are attached to a T bandage, surrounding the waist and under the scrotum. In their passage they are coiled, at equidistant points, round a ring which is placed over the body of the penis.

Where the introduction of a bougie is impeded by spasm anterior to the organic stricture, it is there fixed in the first instance. Thus, in a case of stricture in the membranous part of the urethra, wherein the urine flowed guttatim, the bougie was stopped at the fossa navicularis. It was, therefore, fixed at this part; and at the visit after the expiration of twenty-four hours, it was found to have overcome the obstacle.

The ordinary practice of introducing bougies, gradually increasing in size, on the principle of what M. Dupuytren (as we contend improperly,) calls the *mechanical*, in opposition to the other, which he designates by the term *vital* process, is also employed. In fact, although the confining of a bougie

within the urethra may do well in hospital practice, yet circumstances frequently occur wherein this would not be admissible; nor can it be absolutely required, when any one may be taught to cure a stricture by the graduated bougie alone.

The bougies used at the Hôtel Dieu are principally of elastic gum, tapering from one extremity to the other, which is a very considerable improvement: thus a bougie which at one end shall have a sixth of an inch in diameter terminates at the other in a fine point, capable of being worked into the minutest passage. We can scarcely contemplate a case, unattended by spasm, where, with ordinary dexterity, the introduction of such a bougie into the stricture could be impeded; and, in nine cases out of ten of retention, this penetration alone will be sufficient to promote the flow of urine, on the withdrawing of the bougie.

It may be proper to make one remark respecting the *modus operandi* of the bougie, which M. Dupuytren professes not to understand, as his term *mechanical* implies. There is nothing mechanical or dilatable in the process, according to the ordinary acceptation of these terms. The friction or compression produced by the bougie excites the action of the vessels, which is followed by the absorption of the thickened urethral membranes. Friction and compression operate in the same manner in the resolution of tumors on the external surface of the body.

EXTRA-UTERINE FETATION.

Case of supposed Extra-uterine Fætation.

By GEORGE JEWEL, Esq.

Mrs. T., residing in the neighbourhood of Manchester-square, a robust healthy woman, has been married two years, and has once aborted. In the month of September, 1827, she quitted her husband, who resides in London, having accepted a situation in the country. At the expiration of a few weeks, she received permission to come to town for a day to see her friends, and, as a natural consequence, passed the night (November 8th) with her husband; the following morning returning to her situation in the country. Soon afterwards, the various sympathetic affections of pregnancy manifested themselves: the morning sickness and heartburn were not only present, but occasioned at times great suffering. The breasts became enlarged and painful, and the areola extended. The catamenia, however, returned at the regular periods, but the secretion was scanty, and of a paler colour than formerly. She now quitted her situation, and returned

to her husband, and engaged an intelligent midwife to attend in her approaching confinement.

The circumstance of quickening occurred in the last week of February, and, as is not unfrequent, it was accompanied by a severe paroxysm of fainting. The abdomen gradually enlarged, and the movements of the child, as imagined, could not only be detected with the hand, but were visible to the eye.

On the 9th of August, making a period of 274 days, she was seized with the usual premonitory symptoms of labour: there was pain in the back, a frequent inclination to void the urine, and a slight mucous discharge from the vagina. The midwife was sent for, and soon arrived: she found the patient walking the chamber, and concluded, from her general appearance, and from the presence of all the phenomena of labour, that the process had considerably advanced. Three distinct uterine contractions occurred after the arrival of the midwife, the last of which, from its severity, caused the patient to grasp firmly the back of a chair, and upon its subsiding she became very faint. From that period no further parturient effort was made.

It is necessary to remark, that no examination was made per vaginam; neither was there observed any sanguineous vaginal discharge.

A few days after this occurrence, I first saw the patient, and, having made the usual examination, the os and cervix uteri were not found to have undergone any change. The general health of the patient continues much disordered. The catamenial secretion, still pale, at the last period, did not exceed in quantity a few drachms. The breasts are becoming flaccid, but occasionally painful. She complains of pain in the left hypogastrium, particularly towards night, or when the abdomen is compressed by the hand or by her stays. The abdominal tumor is about the size of a woman's who had arrived at about the seventh month of utero-gestation. She also complains of a weight in the abdomen, particularly upon leaning forwards; and there is a strong impression on her mind that there is "something to come away," or that she might be relieved by an operation.

I am fully aware that females, at the period of life when the catamenia are about to cease, and more particularly if they are very desirous of having a family, often imagine themselves to be pregnant; and that occasionally a variety of anomalous symptoms arise, which are very analogous to the sympathetic affections of pregnancy; but I am not aware that the uterus ever takes on an expulsive action without concep-

tion, either uterine or extra-uterine, had actually taken place, or unless it had to get rid of some extraneous body. The nature of the case may be questioned from the circumstance of the uterus not having secreted or expelled its deciduous membrane; but the absence of this tunic would not prove my surmises to be erroneous. Mr. BURNS, a great authority, says that in *most instances* decidua is formed. Dr. BLUNDELL, whose researches have been extensive, examined two cases in which the decidua were wanting. Mr. LANGSTAFF, in an examination of a woman post mortem, in a similar case, could not find any deciduous membrane. The strongest feature of the case is, the patient sleeping one night only with her husband, and the uterus taking on its parturient action precisely at the termination of the nine calendar months.

Sackville street ; Dec. 2d, 1828.

HOSPITAL REPORTS,

(Principally condensed from various Periodical Publications.)

INJURIES OF THE HEAD.

I. Violent Concussion, with arterial Bleeding from the Ear.

J. S., aged forty, a servant, admitted at St. THOMAS'S HOSPITAL, under the care of Mr. TRAVERS.

October 12th, he fell from a horse upon his head, about noon. At one o'clock he was brought to the hospital, with symptoms of concussion, viz. insensibility, contraction of the pupils, vomiting, a weak pulse at 104, strabismus, and stertorous breathing. There was considerable arterial hemorrhage from the right ear and nose. He had been bled immediately after the accident. The head was shaved, and carefully examined, but no fracture was discovered.

Spirit wash was applied to the scalp.

At two P.M. he was still insensible, passing his stools involuntarily, and vomiting occasionally, which action caused the blood to flow afresh from his ear. The strabismus and stertorous breathing were no longer observable. The pulse had fallen to eighty-four, and continued weak.

Six P.M.—Reaction taking place: pulse ninety-four, and fuller; slight sensibility, great restlessness; another involuntary motion; matter vomited slightly tinged with blood. From this time to nine P.M. the pulse became gradually fuller. At ten P.M. he was ordered

V.S. ad 3x. Hirudines xx. occipiti. Emp. Lyttæ nuchæ. Contr. Lot. spirituosæ.

13th.—Has been restless since five o'clock, vomiting frequently. Complains of pain in the forehead and occiput; pulse eighty, and

soft; pupils contracted; twitching of the mouth and limbs when asleep.

Pulv. Scam. c. Cal. gr. x.—C. C. occipiti ad ℥xij .—Ol. Ricini p. r. n.

14th.—Slept well until three o'clock; since which has been very restless; answers incoherently; says he is blind; pupils contracted, and quite insensible to light; three stools; pulse eighty, and fuller.

V.S. e venà jugulari ad ℥xiv . Cont^r Lot. spirituosæ.

Pulse rendered softer and a little quicker by the bleeding.

15th.—Was very restless during a part of the night. Passes his water freely, but has had no motion since yesterday morning; is sensible, and replies to questions put to him; pulse seventy, and soft; pupils somewhat more dilated, but they do not contract when the light is suddenly increased. The blindness, of which he complained yesterday, is gone off; he says that he can see. No return of the vomiting; occasional twitchings of the limbs, with great pain in the head. Ol. Ricini statim.

Twelve P.M.—Pulse sixty, full and hard; very restless; bowels moved twice. V.S. ad ℥xvi . After the bleeding the pulse increased ten beats in the minute, and became softer.

16th.—Slept well since the bleeding; is sensible, and appears to see; pupils inactive; great pain and soreness of the head; bowels moved twice in the night; gets out of bed to make water; pulse seventy-two, and weak; skin dry.

Pil. Hyd. Submur. c. Colocynth gr. x. hæc nocte. Mist. Salin. Cathart. mane.

17th.—A quiet night. Head very painful; pupils act slightly; tongue white; bowels moved three times.

Hirudines xx. occipiti. Pulv. Scam. c. Cal. gr. x.

Eight P.M.—Pulse seventy-four; pupils more sensible to light, but does not appear on the whole better: he moans much.

Hirudines xxx. occipiti.

18th.—Slept well until two A.M. when he was seized with a general convulsion, which returned several times before six o'clock. When he was seen after the convulsions had ceased, his pulse was 112 and small, countenance anxious, skin hot, tongue white, pupils sluggish; bowels freely opened.

From the date of this report he gradually improved.

II. *Slight Concussion of Brain, with venous Bleeding from the Ear.*

J. L. æt. sixty-one, admitted at St. Thomas's Hospital, under Mr. GREEN, November 6th. Is keeper of the gates at one of the bridges, and was attempting to stop a horse which had run away, by closing the gate, when the animal ran against him, and threw him down. He was taken up insensible, and vomited several times. When brought to the hospital, an hour after the accident, he was still insensible, but soon began to recover his consciousness, and in half an hour was able to answer questions. A lacerated

wound, two inches in length, was discovered on the occiput, but no fracture was perceptible there. There was fracture of the radius and ulna of one arm. Bleeding from one ear was observed soon after his admission; and during the remainder of the day three or four ounces of venous blood slowly oozed out. The pulse, which was very weak on his admission, rose soon after; but the breathing continued laborious the whole evening, and he occasionally was delirious.

Mist. Cathart. Splints to the arm.

7th.—Slept little, but no bad symptoms.

8th.—Went out well, as far as the head was concerned.

III. *Fracture of the Cranium, followed by Depositions of Lymph in the Lung and on the Pleura.*

A. B. aged forty-five, a distiller's collecting clerk, in the habit of drinking great quantities of spirits.

This patient was brought into St. Thomas's Hospital with a comminuted fracture of the patella, and a punctured wound on the forehead, which were stated to be the consequences of a fall from some height. The symptoms of injury to the brain or its coverings were so slight, that none was suspected: he was, however, bled to twelve ounces, as a measure of precaution.

The following day, his pulse being rather hard and quick, he was again bled, and some purgative administered.

There being no evidence to the contrary, he was believed to be doing well until November 19th, the fractured patella obtaining the chief share of attention in the interval: on that day, however, Mr. TRAVERS found him complaining of pain in the head, and discovered that fungous granulations were sprouting up out of the wound on the forehead. He put in a probe, and felt the cranium denuded to some extent; and, having dilated the wound, he found that a portion of the cranium, containing nearly two square inches, was bare, indicating a separation of the dura mater from the bone. The only other symptom in addition to the wound in the head was a purulent discharge from one of the nostrils.

C. C. ad 3xij. Rep^r Pil. purg.

Nov. 20th.—The patient being much worse, Dr. WILLIAMS saw him, and found him suffering from a violent pain in the right hypochondrium, similar to that produced by the passing of a gall-stone, and unattended by any decisive symptoms of inflammation.

C. C. hypochondrio dextro.—Magnes. Sulph. 3i. ex Mist. Camph. sextis horis.

21st.—Complains of pain in side, but none in the head; delirious.

22d.—No alteration, except that he is sensible, and, when asked where his pain is, complains of his side.

23d.—Died this day; delirious before death.

Sectio cadaveris.—The denuded portion of the cranium appeared

roughened and bloodless; a very minute fissure, unobserved before death, extended vertically through it as far as the orbit. After the brain had been removed, a continuation of the same fissure was traced upon the orbital plate of the frontal bone, where it soon became divided into two, one of which ran along the cribriform plate of the ethmoid bone, close to the crista galli, and terminated in the processus olivaris, which was broken into several portions; while the other, taking a direction outward for a short distance, again turned inward, and met the first near its termination. A considerable portion of the orbital plate was thus detached, and slightly depressed upon the parts below; a portion of the cribriform plate was also separated. The internal surface of the frontal bone, where the fissure commenced, was, like the external, denuded of its periosteum; the dura mater roughened from absorption, and bloodless. Between it and the dura mater there was a small collection of pus; the membrane was softened, as if beginning to slough; and in the anterior lobe of the cerebrum behind it were seen what appeared to be the effects of acute inflammation following laceration, viz. a breaking-up of the cerebral substance, and conversion of a part of it into imperfect pus. Pus was also found lying on the cribriform plate over the fissure, and the dura mater there was sloughy: thus the discharge of pus through the nostril was accounted for. The cavity of the right pleura contained a pint or two of lemon-coloured transparent serum; the surface of the pleura covering the lung was covered with a layer of apparently recently effused lymph. Entering into the substance of the same lung, to the depth of about an inch, were several finger-shaped deposits of white and tolerably firm lymph: none of these had proceeded so far as to be softened or converted into pus. The left lung was healthy. The liver was very large, but healthy in its structure.

IV. *Injury of the Head; Disease of the Bone.*

Thomas Price, a postboy, thirty-two or thirty-three years of age, was riding a vicious horse in the month of July, 1827, when the animal threw him with considerable force upon his head. He was stunned for some minutes by the fall, but no wound of the scalp was produced, and, after the immediate effects of the injury had passed, he was able to return to his usual employment. In the course of a few weeks there came on such pain in the forehead that he could not endure the exertion of riding. Some months had now elapsed since the infliction of the injury, when an abscess formed upon the vertex, and was opened at the commencement of the present year.

On admission into ST. GEORGE'S HOSPITAL, the 8th of last October, there was constant, often violent, pain in the forehead, giddiness, and indistinct vision. The iris of both eyes was very irregular in its action, but the pupil of the right was mostly dilated,

that of the left being natural in size. Near the crown of the head was a small and nearly circular ulcerated opening of the soft parts, through which the probe passed down to exposed and carious bone. The man was emaciated; his aspect pallid, his expression somewhat vacant. The tongue was clean; the pulse was always quick. He said that his memory was impaired.

On the 10th, Mr. BRODIE enlarged the opening leading to the bone, but found the diseased portion too firm to be removed by any thing short of the trephine. Accordingly, on the 16th, having previously obtained the advice and concurrence of Mr. KEATE, a crucial incision was made in the scalp, and a small trephine applied at the spot where the dead bone was felt. The portion embraced within the circle of the instrument having been removed, and a very copious bleeding, which occurred from the scalp and substance of the bone, being checked by pressure, the dura mater was examined, and found to present on its surface a little coagulable lymph, without any purulent matter. On inspecting the bone, the caries was seen to have stopped at the diploë, the tabula vitrea remaining sound. Two or three of the bleeding vessels were secured, and the flaps of the scalp brought together with a suture.

No unfavorable symptoms followed the operation, nor was it succeeded by any very marked relief. Some œdematous swelling took place about the occiput, and he suffered, on the 17th, from headache and soreness of the scalp. The pulse at this time was 100; the tongue clean and moist; the bowels not open since the operation. He was bled to twelve ounces, and ordered

Haustus Sennæ ʒij. statim. Haust. Salin. c. Vin. Ant. Tart. m.xv. M. sextis horis.

He vomited that night, and again on the 18th, when, however, he was better. The pulse was 124, the tongue moist, the bowels open; and his head, he said, was easier than it had been for months. Six ounces only of blood had been taken, and that was not buffed.

Repr̄ H. Salin. sine Liq. Ant. Tart.—Cucurbit. cruent. inter scapulas. V.S. ad ʒx.

Next day the pain of the head was worse; the pulse 108, tongue moist, the right pupil more dilated than the left. By the 20th, the pain had entirely disappeared; the tongue was clean, the pulse ranging from 100 to 108.

Thus he continued, with very little change, till the 18th November. On the 17th, he had taken a dose of *Haustus Sennæ*, and next day he was seized with sickness, succeeded by headache and pain in the forehead, infinitely worse than ever it had been before. The pulse, which for some days had been as low as eighty, rose and was fuller. The wound had nearly closed, but a free passage still remained for the exit of matter.

Cuc. cr. much. ad ʒx.—H. Sal. ʒiss.; Magn. Sulph. ʒi. sextis horis.

On the 19th, being no better, he was bled once more to ten

ounces, and a blister applied to the neck. He vomited several times that evening, and the 20th brought no relief, at least to the pain in the head. On the 21st, the pain in the forehead was excruciating, and the head was seen to move at every pulsation of the heart. The pulse was ninety, and full; the thirst was great; the countenance anxious, and depressed in the highest degree. At one time the patient would be calm; in a very few minutes rolling in his bed in absolute agony.

Small bleedings were repeated on the 22d and 23d, but the blood was buffed on one occasion only.

On the 24th, the termination of the case was perceptibly approaching. The pain was dreadful, the pulse very weak, the tongue becoming brown, the manner even more than half delirious. An increased discharge had taken place from the wound in the night, and today Messrs. Brodie and Keate divided the cicatrix, and freely enlarged the small opening that remained. No matter, however, was found or escaped.

Pulv. Ipec. C. gr. x.; H. Salin. statim, et h. s. repetend. si opus sit.

The 25th brought no relief whatever. The tongue was brown and dry, the pulse quick and feeble, and something like brain mixed up in coagulum was found upon the wound. In this condition the patient was removed from the house by his friends, to a distance of one or two miles, presenting a most melancholy spectacle. He died that evening. No dissection was permitted; but hernia cerebri had taken place.

PERFORATION OF THE DUODENUM.

Case of Perforation of the Duodenum, with Discharge of the Contents of the Stomach between the seventh and eighth Ribs.

M. A. W., aged thirty-nine, eight years a widow, residing in Carden street, Worcester, was admitted at the WORCESTER DISPENSARY, under the care of Dr. STREETEN, March 6th, 1828. At the time of admission, she complained of great pain in the epigastrium and right hypochondrium, aggravated by pressure; the pulse was quick; the bowels irregular, and the stools dark coloured; the tongue furred; she had cough, with muco-purulent expectoration, and hurried breathing; there was a hard painful tumor under the right scapula; the catamenia were irregular, and she was much emaciated.

She is reported to have enjoyed pretty good health till about four years ago, when she was attacked with severe pain in the right side, shooting through to the shoulder; for which she was bled, and had leeches to the side, and took purgative medicines, with partial relief.

In March last, she again became a patient of the dispensary, with similar symptoms. A few days before her admission, a small tumor was perceived, immediately below the right scapula, which increased in size, at first gradually, but afterwards more rapidly,

till it formed a swelling about the size of an orange. Leeches were applied to the tumor, and afterwards a poultice. In the course of a few days it broke, and discharged a large quantity of purulent matter, occasionally bloody and fetid. The strength was supported by nourishing diet and port wine, while anodynes were given to procure sleep and allay pain. She took also the sulphate of quinine. Under this treatment an evident improvement took place, and she appeared to gain strength; the acute pain was relieved, but the side, she said, felt as if raw internally. The wound was dressed with simple cerate and bandages, and on the 10th of June the discharge had nearly ceased.

On the 16th of June, a small painful swelling appeared beneath the skin, situated between the seventh and eighth ribs, about an inch and a half anterior to the angle of the ribs. This gradually increased in size till the evening of the 26th. The skin then gave way, and a large quantity of very offensive, dark coloured, bloody matter was discharged. Matter and coagulated blood, of a very fetid smell, continued to come away at intervals till the 1st of July; since which period the discharge has been in greater quantity, and, it is reported, of the same nature as the food which she has taken.

On the 4th of July, she had considerable pain in the right side, and soreness between the two orifices. The appetite was pretty good; the tongue clean and moist, and the bowels regular. She had at times alternations of heat and chilliness, with perspirations; especially during sleep. The pulse was 120, and feeble. She was exceedingly emaciated, and appeared very weak; the cough, (with which, and the expectoration of muco-purulent matter occasionally tinged with blood, she had been affected from the first commencement of her complaints,) was very troublesome.

On the following morning, a cup of coffee was given her, and almost immediately after a quantity of fluid came from the orifice, below the mamma. This was caught in a clean cup: it was clear, of a light brown colour, and had a decided smell of coffee. There was no uneasiness whatever in the left hypochondrium, but she said she felt occasionally as if the drink which she took went towards the back, and up to the right axilla. None has been observed to escape from the wound below the scapula.

On the 26th, Dr. Hastings saw her with Dr. Streeten. The emaciation and debility were then extreme; the pulse was quick and feeble; the appetite had failed; the bowels were rather costive; the cough was exceedingly troublesome. She took a little water at the visit, which almost immediately came out at the wound: it had a sour smell. Some milk-and-water was then given her: this passed through the external orifice five minutes after it had been taken, perfectly curdled. The abdominal muscles were thrown into action previous to the passage of the milk. She died in the course of the night.

Sectio cadaveris.—Body reduced to the extreme of emaciation.

Between the seventh and eighth ribs, about an inch and a half from the angle, were two openings; the larger about an inch in length, the smaller large enough to admit a horsebean. The wound looked dark and sloughy. The lower edge of the seventh, and the upper edge of the eighth ribs, were carious for about an inch in the site of the wound.

Abdomen: The left lobe of the liver was greatly enlarged, and of a pale colour, extending across the epigastrium into the left hypochondrium, and displacing the stomach. The right lobe was of a globular shape, about the size of a large heart; its inferior edge was tumid and rounded. It was closely applied to the left lobe; and, at the superior and anterior part, firmly connected with the cartilages of the seventh and eighth ribs, by a strong fibro-cartilaginous structure, in some places upwards of a quarter of an inch in thickness.

The stomach was displaced by the enlarged liver, the larger curvature being situated a little below the umbilicus, and the smaller curvature being applied to, and lying under, the thin convex edge of the left lobe. The cardiac and pyloric portions were elongated and narrowed by the stretching arising from the displacement and depression of the central parts. The pyloric portion of the stomach ascended from the great curvature below the umbilicus, merging beneath the edge of the left lobe of the liver, and then passing between the right and left lobes, by which it was strongly compressed, was attached at and around the pylorus, upon the upper or convex surface of the liver, and in close and intimate connexion with the cartilages of the eighth and ninth ribs. Immediately beyond the pyloric orifice, the duodenum curved downwards from this point of attachment, and passed between the right and left lobes of the liver, through the same channel, and behind the ascending or pyloric portion of the stomach. Beyond this point the duodenum was much contracted, and contained a small quantity of yellow mucus. Exactly at the point where the curve of the duodenum occurred, there was an opening in its coats, which was about two inches and a half from the external orifice, and communicated with it by a channel running obliquely upwards and outwards. This channel proceeded along the inner surface of the cartilages of the eighth and ninth ribs, crossing the intercostal space, and was then continued along the body of the seventh rib, where it terminated in a deep groove in the lower edge of this rib, just before it unites with its cartilage. The channel was formed anteriorly, by a superficial excavation, or rather smooth depression in the thickened cellular structure lining the cartilages of the ribs; its posterior surface was formed by the tough fibro-cartilaginous substance which connected the liver with the inner surface of the ribs.

The mucous membrane of the stomach was perfectly healthy.

Below the stomach was situated the arch of the colon, with the

omentum lying across the small intestines, midway between the umbilicus and the pubes.

Thorax: There were strong adhesions between the pleura pulmonalis and costalis, on the right side of the chest. Between the seventh and eighth ribs, immediately below the right scapula, was a communication between the cavity of the thorax and the exterior of the body; and the eighth rib, at this part, was found to be carious. This was the site of the wound in the back, mentioned in the account of the case. There was no appearance of disease on the surface of the pleura pulmonalis, corresponding with this opening. The right lung, at its inferior part, was resting upon, and inseparably connected with, the superior edge of the right lobe of the liver, through the medium of fibro-cartilaginous substance; all traces of the diaphragm in this part being lost. Both lungs were extensively diseased, containing small, firm, white tubercles; some of them advancing to the suppurative stage.

The head was not examined.

It appears, from the above statement, that there must have been an original malformation in the subject of this case; and that the unusual position of the pylorus and upper part of the duodenum, upon the superior or convex surface of the liver, was intimately connected with its extraordinary termination. The repeated attacks of inflammation of the liver appear to have induced enlargement, with deposition in the parenchymatous structure of that organ; and, subsequently, compression and constriction of the upper part of the duodenum, in consequence of its unusual position between the two lobes. Hence a difficulty arose in the transmission of the alimentary mass from the stomach into the portions of the intestinal canal situated below the constriction. The natural action of the stomach appears to have transmitted the food through the pylorus, and thus to have overcome the compression existing upon the pyloric portion of the stomach. But when the food had passed through the pyloric orifice, the vis a tergo could no longer have acted in a favorable direction, but must have been exerted upon that portion of the duodenum at which the curvature took place; and the passage downwards being impeded by the partial compression arising from its situation between the right and left lobes of the liver, ulcerative absorption occurred exactly at the spot where pressure from behind was most felt, that is, at the point of the curvature. The same causes continuing in operation, produced the gradual formation of the channel in the thickened cellular membrane between the cartilages of the ribs and the liver, till, approaching the intercostal space, it terminated externally, producing caries of the ribs, and ulcerating through the integuments.

FRACTURE OF THE LEG.

Fracture of the Leg, communicating with the Ankle-Joint.

J. WEST, ætatis forty-one, was admitted into the WORCESTER INFIRMARY, September 19, 1825, under the care of Mr. SHEPPARD, with compound fracture of the leg. On examination, both bones were found fractured about four inches above the ankle, with two small wounds through the skin, corresponding to the fractured ends of the bones. The tibia was also broken immediately above the malleolus internus, and this fracture was discovered to communicate with the ankle-joint. The lower part of the leg and foot was severely bruised. The man's general health was much affected, having been labouring under illness for the last six months.

Treatment.—The bones, which were but slightly displaced, by gentle extension were easily brought in apposition with each other; the edges of the wounds were brought together by adhesive plaster, and the leg placed on the side in the semiflexed position. It was bound up in the tail bandage, and a splint placed above and below. The parts to be kept wet with a cold evaporating lotion.

Sept. 20th.—Has had much pain in the leg during the night. Pulse 100; tongue white and dry; skin hot, but moist; there is tenderness on pressure in the epigastric region.

R. Hydrarg. Subm. gr. v.; Pulv. Jalapæ gr. xv. fiat bol. stat. sum.—
Mist. Cath. ʒij. post horas quatuor.

21st.—Leg rather easier this morning; he had about two hours' sleep during the night. Pulse 100, not hard; tongue no cleaner; bowels rather confined. The pain and tenderness of the epigastric region removed.

Rept' Haustus Cath.

23d.—The leg dressed this morning: wounds have not united; the contused parts over the tibia, to some extent, are of a livid hue, and appear likely to slough. The febrile symptoms somewhat aggravated.

Sumat Haust. Salin. efferves. quartis horis.—Pulv. Ipecac. Co. gr. x.
b. s.—A poultice to be applied to the leg.

26th.—The dead parts are separated, and there is a large unhealthy sore surrounding the tibia, about the size of a crown piece, whereby the fractured ends of the bone are exposed: they are in close contact with each other. There is a small slough over the fibula, but it is merely superficial.

28th.—Wound discharges profusely; has no pain; in other respects much the same. Allowed meat and four ounces of port wine daily.

October 1st.—The leg is improved in appearance, and the wound looks cleaner. Granulations are beginning to show themselves. Has no pain; sleeps well at night; appetite good.

4th.—The wound looks exceeding well; granulations of a florid colour. There is a small opening near the ankle, which probably

communicates with the joint, as a fluid is constantly escaping from it, having much the appearance of synovia. The leg keeps in a very good position, and is perfectly easy.

6th.—Continues to improve. Only a very small portion of the bone visible, the rest being covered by granulations; discharge lessened. The poultice discontinued, and the wounds dressed with lint and the chalk cerate.

13th.—Wound begins to cicatrise, and no part of the bone is now visible. Bowels, tongue, and pulse natural.

29th.—The wounds are now quite healed; union between the bones appears to have taken place; health very good.

November 30th.—Discharged cured.

This was a very successful case. The leg was only lifted once during the whole cure, silk oilskin being placed between the bandages and the dressings.

WOUND OF THE ABDOMEN.

Punctured Wound of the Abdomen, with Protrusion of a portion of the Omentum.

WILLIAM WATSON, æt. twenty-one, was admitted at ST. BARTHOLOMEW'S HOSPITAL, under the care of Mr. EARLE, on the 8th of November, having a protrusion of omentum, about three inches in length, from a punctured wound on the right side of the abdomen, which he says was inflicted by a carving knife. When admitted, he was sick and faint, and there was a great deal of pain about the parts. The wound was about three-fourths of an inch long, situated in a transverse line from the umbilicus, and about one inch to the outer side of the rectus muscle. The omentum was firmly grasped by the edges of the wound, and was very vascular, being of a vermillion colour: it was bleeding very slightly from its surface. After some unsuccessful attempts had been made to return the omentum, it was deemed advisable to enlarge the wound; but great resistance was still made by the abdominal muscles, and the parts could not be returned without some difficulty. When the omentum was replaced within the abdomen, the wound was closed by one suture through the integuments, care being taken to avoid the peritoneum.

The pulse was rather small, and about eighty. He complained of pain in the wound. Five hours after this, the pulse having risen and become more frequent, and the wound being more painful, the bandage was relaxed, and he was bled to $\frac{3}{4}$ xx. when he fainted. An enema was given, and he had one good evacuation. Four hours after this, the pulse being 108 and full, he was again bled to $\frac{3}{4}$ vi.

9th.—Had a tolerable night; not so much pain in the wound. Pulse ninety, and not very full. Bowels open twice. In the evening the pulse was fuller, but not more frequent, and perfectly compressible; tongue clean.

From this date he gradually improved.

FRACTURES OF THE CERVICAL VERTEBRÆ.

CASE I.—James Halford, admitted into ST. BARTHOLOMEW'S HOSPITAL, on the evening of November 10th, about eight o'clock, with complete paralysis of upper and lower extremities, consequent to injury of the cervical vertebræ, occasioned by a fall from the top of a loaded waggon. When admitted, had not the power of raising his head, had lost all sensation and power of motion, excepting that he was able to turn his head from side to side when in bed; complained of great pain in the back of the neck; respiration slow and oppressed, performed by the diaphragm only, the intercostals being completely paralysed; pulse about sixty, somewhat full; partial priapisms.

On examining the back of the neck, the spinous process of the fifth cervical vertebra was found to be displaced, and more prominent than usual. From this and the attending symptoms, it was concluded that there was fracture probably extending through the bodies of the cervical vertebræ. During the night the priapisms became more frequent, and towards morning a quantity of flatus had collected in the abdomen; nothing had passed per rectum, and an enema was ordered. With the view of exciting the muscular action of the intestines through the nervous influence, a stream of galvanism was directed from the back through to the rectum: this at first had the effect of somewhat lessening the distention, but the tympanitis soon increased, and continued to extend, though the galvanism was kept up for upwards of half an hour, varying its direction: occasionally it was applied with less power through the œsophagus to the rectum. The patient was bled to about six ounces, when he became sick and faint; a drop of croton oil was given in two doses, but without any effect; the water was drawn off twice, the smell of which was slightly ammoniacal. He gradually sunk from the oppression, continually turning his head from side to side, and died at six P.M.

On dissection, it was ascertained that dislocation had taken place between the fourth and fifth cervical vertebræ. The ligamentum subflavum was torn throughout, and the apex of the fourth spinous process lay in close contact with the basis of that of the fifth. The antero-posterior diameter of the vertebral canal was lessened by this displacement nearly one-half; the spinal marrow was soft and pulpy, and blood was effused in its substance; its membranes were entire; some blood was effused in the canal between the bones and the membranes.

CASE II.—November 11th, J. Taylor, about sixty, was admitted into the same hospital in a state of complete paralysis of the whole body, caused by a fall from a height of about fourteen feet. There was a depression of one or more of the lower cervical vertebræ; he complained of pain upon pressing the injured part, and also of pain in the right arm just below the elbow, and at the outside; he

asked if the skin was rubbed off from that part; he had no priapism; pulse small and rather slow; breathing laborious; perfectly sensible.

12th.—Symptoms much the same; priapism took place during the day; has had no evacuation since the accident, though two injections have been given. About a pint of urine was drawn off in the morning, and nearly half a pint more in the evening. Pulse same as last night. Respiration became more laborious, and he died about three o'clock in the morning.

Dissection.—The situation of the displacement was between the sixth and seventh cervical vertebræ, the articular processes were broken, and the ligamentum subflavum and fibro-cartilage torn; the spinal cord was crushed, and blood effused in small spots in its substance; the lungs were loaded with blood, with a little mucus in the air-cells.

EXTRA-UTERINE PREGNANCY.

E. HAYDN, aged twenty, the mother of one child, now eighteen months old, was admitted, October 29th, into GUY'S HOSPITAL, under the care of Dr. BRIGHT.

Her illness had been of six months' continuance, but had not been very severe until within the last three weeks.

From her admission to the period of her death, she laboured under symptoms which, while they were principally referrible to some disorganization of the thoracic and abdominal viscera, were still indistinct. The most constant symptom was the frequent evacuation of a fluid of a dark grumous appearance. She had also dyspnœa, and occasional tenderness of the abdomen; but of the latter no trace was remaining a few days previous to her death.

The treatment, which was directed principally to the intestinal affection, is uninteresting: it appeared to exercise no control over the symptoms.

Death took place in the night of November 15th, and the following morning, while the body still retained some warmth, it was examined by Dr. HODGKIN.

In the abdomen, a large portion of the peritoneum lining the parietes presented a very dark appearance, less intense superiorly, but deepening towards the pubic region. Numerous adhesions were found, evidently varying in the periods of their formation: these were fewer in the umbilical region, firmer and more numerous towards the pubes. In the left side of the lower belly, these adhesions were so numerous and extensive as to form a perfectly shut cavity, bounded by the sigmoid flexure of the colon, the rectum, the bladder, the lateral and anterior parietes of the abdomen and pelvis, in their respective situations. This cavity enclosed a fœtus, tolerably well formed, of about three months' growth, attached, by an umbilical cord of natural length, to a mass of the size of an egg, apparently performing the office of placenta. These

parts, like the cavity itself, were all of a dark brown colour, apparently from a process of decomposition, and the parietes of the cavity were loose and soft, so as readily to separate into shreds.

This cavity communicated with the intestinal canal by two openings, of which the smaller entered the rectum; while the larger, which was two or three inches in length, was in the sigmoid flexure of the colon.

The mucous lining of these intestines was healthy, except at the very margin of the apertures. The uterus was healthy, and afforded no trace of tunica decidua; it was not adherent to the rectum. Nothing remarkable was observed in the ovaries or fallopian tubes, except that, attached to one of the latter, there was a thin membranous cyst, ruptured and collapsed, which had probably contained the fœtus from its formation until it became free in the abdomen, and was enclosed in the new cavity in which it was found.

CRITICAL ANALYSES.

*Quæ laudanda forent, et quæ culpanda, vicissim
illa, prius, cretâ; mox hæc, carbone, notamus.*—PERSIUS.

A Manual on Midwifery; or, a Summary of the Science and Art of Obstetric Medicine; including the Anatomy, Physiology, Pathology, and Therapeutics, peculiar to Females; Treatment of Parturition, Puerperal and Infantile Diseases; and an Exposition of Obstetrico-legal Medicine. By MICHAEL RYAN, M.D. &c. &c. &c.—8vo. pp. 353. London: Longman and Co. 1828.

A Practical Treatise on Parturition, comprising the attendant Circumstances and Diseases of the Pregnant and Puerperal States. By SAMUEL ASHWELL, Member of the Royal College of Surgeons, and of the Medico-Chirurgical Society of London. To which are appended two Papers, the one containing some Remarks on Abdominal Surgery, the other on Transfusion; presented by Dr. BLUNDELL, of Guy's Hospital.—8vo. pp. 546. London: T. Tegg, 1828.

THE tone of self-complacency which runs through the preface of the first of these volumes is highly amusing. It is quite impossible that the public can estimate the value of the work at a higher rate than the author does; and if they only keep pace with him in the eulogiums he has so liberally bestowed upon himself, he cannot with reason be dissatisfied. Dr. RYAN's opinion of Dr. Ryan's book is, that "there is no other work of this size, foreign or national, that contains so much practical information." The classification, also, "is more scientific than that of any other writer." Notwithstanding

ing the encomiums he has lavished upon himself, the author trusts that he "will not be deemed egotistical!" Upon this point, however, the verdict must be against him, or we misapprehend the meaning of the term.

Dr. R. piques himself for having treated very fully the disputed question of the power of the mother's imagination on the infant; and he thinks he has exposed the ridiculous stories of ruder ages, and succeeded in establishing the *negative* opinion on the subject. Will he forgive us if, without "a few words apologetic," (to use his own phrase,) we suggest to him that, in future, he need not labour to prove the negative of a proposition, unless he can find somebody to support the affirmative. Errors which have been long abandoned demand no longer formal exposure.

"Official duties" at a crowded dispensary, and "innumerable interruptions attendant on private practice," have prevented the author from paying as much attention to the style and arrangement of the work as he could have wished: he therefore thinks "allowances" ought to be made. But there has been no compulsion in the case: Dr. Ryan has not been *obliged* to write under so extraordinary a pressure of occupation, and cannot, therefore, fairly avail himself of the plea of such interruptions as an excuse for the imperfections his work contains.

As a book of reference for beginners, for which such a work must be principally intended, Dr. Ryan's volume is eminently defective. The arrangement of most of the subjects is faulty and confused: various points of discussion, which have no connexion with each other, follow under the same head in so heterogeneous a manner, that the student must expend much time before he could find the subject he was in search of. The author, indeed, presumes that the work affords great advantages to the student; "for he may fairly consider it a review of the ancient and most modern works on obstetric medicine." Now we apprehend that a "pocket companion" for such a class of readers should give a clear and practical sketch of the subjects it contains, and that it is injudicious and useless to encumber it by enumerating a great variety of discrepant opinions and hypotheses, which may be interesting for the senior practitioner to look over, but which will certainly tend to damp the ardor of a beginner, and to confuse his mind. Neither can we commend the introduction of a number of new and unnecessary terms, such as "gynæcophysiology," "parthenosology," "lochianosology," &c. We are not in the habit of examining with much critical severity the style in which a medical writer delivers his sentiments. It

would not be difficult to enumerate many authors who have made very important additions to our stock of information in very unpolished language; but, in more than one division of Dr. Ryan's work, we observe, with much regret, that he indulges in a wantonness of phrase which, as a lecturer, he ought studiously to have avoided. He informs us that the ancients maintained that "the mind should be sober and chaste" while acquiring a knowledge of the structure of females. In his chapter upon "gynæcophysiology!" our modern author, however, has not evinced either much sobriety of expression or chastity of thought.

From the numerous references Dr. Ryan makes to a long list of authorities, it is very evident that he has given much time to the study of his subject, with which he may be generally well acquainted. Every page abounds with quotations from various sources, but unfortunately they are so loosely and carelessly thrown together, that the negligence of the author as to method destroys the advantages which might have resulted from his industrious researches. *Undique collatis membris* is stamped in every part of the book, but the members are too unskillfully united to form either an agreeable or instructive whole.

The design of Mr. ASHWELL has been to steer a middle course between the large and comprehensive systems of BAUDELOQUE, DENMAN, and BURNS, and the mere outlines and manuals upon the obstetric art. Drs. BLUNDELL and MARSHALL HALL have afforded the author many valuable suggestions and most important facts. That part of the work which treats of puerperal diseases has been carefully examined by the latter. Dr. E. J. HOPKINS and Dr. F. RAMSBOTHAM have also contributed their assistance.

"The history of midwifery," with which the volume commences, might have been spared: it has, however, the merit of brevity.

Part I. "The Obstetric Properties of the Pelvis, carefully noticing those deviations which may obstruct Parturition." The anatomy of the pelvis is considered only as far as it is essentially connected with parturition and its consequences.

Much difference of opinion has existed as to the separation of the bones of the pelvis previous to or during labour. It is said to be a fact that, in many mammiferous animals, immediately previous to labour, a relaxation of the ligaments, producing a separation of the joints, does occur. RUYSCH and HARVEY, judging from their own observations, were convinced that a similar separation almost invariably takes

place in the human female. DENMAN was inclined to believe that the degrees of separation of the junctions of the bones of the pelvis may be very different, and that when it proceeds beyond a certain degree it is to be considered as morbid. SMELLIE asserts that this separation is very uncommon. Mr. Ashwell is not inclined to believe that any such invariable relaxation of the joints of the pelvis, as would materially facilitate the progress of difficult labour, forms any part of the parturient process. Such is the general opinion, and our own experience convinces us that it is correct.

The following observations should not be forgotten by the junior practitioner. In more than one instance we have known very erroneous opinions given as to the probable duration of labour, from want of reflection upon so obvious a fact.

"The depth of the pelvis is a point of consequence, more especially in estimating the progress of labour. We find at the symphysis pubis it does not exceed an inch and a half, or at most two inches, posteriorly from the base of the sacrum to the point of the os coccygis; when under pressure, it is about four times as deep as in front; and laterally the depth of the inferior extremities of the ischia is about four inches. Bearing these facts in mind, we shall not always allow ourselves to imagine, because we can readily feel the child's head in the front of the pelvis, that its birth is instantly to take place; but, remembering the intermediate depth of the pelvis laterally, and its very much greater depth posteriorly, we shall be fully aware that difficulty may be experienced from incarceration. In making examinations, it is well to avail ourselves of the shallowness of the pelvis in front, which affords the utmost facility for carrying the fingers considerably beyond the brim." (P. 51.)

We pass over much elementary matter upon the subject of deformity of the pelvis, of pelvimeters, and of the structure and dimensions of the head of the child. It is scarcely necessary we should observe, that they demand the careful consideration of the student.

Part II. comprises "Menstruation, the description of the Gravid Uterus, with the doctrines of Conception, Sterility, and the Signs and Diseases of Pregnancy."

The nature of the menstrual fluid is briefly considered. As a proof that it does not coagulate, it is observed, that Dr. MANSFIELD CLARKE, in his lecture on this subject, exhibited a specimen of the menstrual discharge which had remained in a fluid state for many years. Mr. Ashwell states, "that the catamenia are invariably suppressed in pregnancy." That such is the fact in a very great majority of cases, is, we believe, universally admitted: that occasional exceptions

happen to this; as to every other general rule, we are, however, fully convinced from our own personal experience. This subject is by no means unimportant; for, if the practitioner *positively* determines that a woman is *not* pregnant because she menstruates regularly, he will sooner or later discover his error. It appears that Mr. A. has but carelessly referred to the observations of Dr. DEWEES, who not only "adduces cases in which the catamenial discharge did regularly appear during the first three or four months of pregnancy," but who also states that "we are perfectly familiar with a number of women who habitually menstruate during pregnancy, until a certain period; but when that time arrives, it ceases: several of these menstruated until the second or third month; others longer; and two until the seventh month. The two last were mother and daughter."* Dr. Dewees very strictly questioned these patients, who could have no motive for deceiving him, and he declares his conviction that there could be no mistake.

In support of the opinion that women do sometimes menstruate during pregnancy, we give the following passage from Dr. Ryan's work:

"The menses may appear regularly in the first seven months of gestation, according to Dewees, who contends that Hunter, Baudelocque, and Burns, are of opinion that the uterus is not closed by decidua during the first two months of pregnancy. The neck of the womb is free, and hence menstruation may happen; and Dr. Coxe had a patient who menstruated regularly, and in whom there was not more than the size of a thumb-nail of healthy surface in the womb. Dr. Dewees knew a number of women who menstruated during the early months, and a mother and daughter who continued to do so to the seventh month. Dr. Heberden knew a lady who menstruated regularly during four pregnancies. Haller, Hosack, and Francis were of the same opinion. Dr. Dewees knew a woman who menstruated only during pregnancy; also Deventer, Fodere, and Capuron. Dr. Hamilton denies the possibility of the occurrence."

We are only desirous of declaring the occasional continuance of menstruation during pregnancy. We perfectly agree with Mr. Ashwell, that, "for ourselves, we should feel more confident of the existence of pregnancy from an entire suppression of the catamenia, all other signs, with the exception of the abdominal increase, being absent, than we should from the united assemblage of all the other indications, if the catamenial secretion continued with its accustomed regularity, and of its natural character."

* Dewees' Midwifery, p. 96.

We pass over several chapters, which contain much elementary information, conveyed in a concise, yet perspicuous and practical form.

The author observes, that "a diversity of practice has obtained in the management of the membranes, some practitioners invariably leaving their rupture to the natural efforts, while others as invariably break them by artificial means, so soon as they are within reach, and before the dilatation of the os uteri is fully accomplished." What "some practitioners" may do, we cannot venture to determine; but we know no respectable authority who lays down either of these practical rules. To rupture the membranes as soon as they are within reach, must frequently be decidedly improper. But when the pains are strong, and the os uteri well dilated, or that it is judged, from the feel of it, that it is easily dilatable, they may then be ruptured without any hazard of protracting the labour: on the contrary, under these circumstances the parturient process is often more speedily terminated.

Upon this subject Mr. Ashwell observes: "The rule should be, to leave their rupture to the natural efforts; the exception, to produce it by artificial means. There are two instances in which the rupture of the cyst is fully justifiable: first, when, at the sixth or seventh month, there is an attempt to throw off the ovum entire and unbroken, in which case there might be most alarming hemorrhage from the placental vessels, and the fœtus might probably be drowned in its own waters. And, again, when the membranes are unusually tough and unyielding. Here we have known labour delayed several hours from an unwillingness to interfere with its natural progress. If, however, we find the membranes pushed down along the vagina, and protruding beyond the vulva, we may feel assured the os uteri is fully expanded; and we cannot err if, during the height of a pain, we force a stilette through the cyst, after which the child will sometimes be almost immediately born." (P. 250.)

The use of any instrument unnecessarily should at all times be avoided, and, as the membranes may just as easily be ruptured by the finger, or scratched through with the nail, we should not think of using a stilette.

We regret to find it stated in a work designed for the guidance of the student, that "in labours generally it is of very little importance whether we know the presentation or not, as it is most commonly a natural one, and the birth will safely occur independently of our assistance." It is very true that the author follows up this observation, which had been much better omitted, by pointing out the necessity of promptly ascertaining the presentation. Still the previous remark holds

out an excuse for carelessness and inattention, which would have been wisely avoided.

From the following passage it would be inferred that the practitioner is not called upon to ascertain the presentation until *after* the rupture of the membranes. "Supposing the membranes to have been ruptured, and the liquor amnii to have escaped, the first stage of parturition is completed, and the very important duty of ascertaining the presentation devolves upon the accoucheur." (P. 250.) It is very evident that the author is sensible of the importance of determining the presentation *before* the rupture of the membranes; for he has previously laid it down as a rule in midwifery, to see the patient about to be confined as early as possible, "for there may be a preternatural presentation, and, from the rupture of the membranes and the escape of the water, the favorable moment for turning may be lost previously to the arrival of the accoucheur." We have read and reread the sentence above quoted, and can attach to it no other meaning than that we have assigned, although it is clear Mr. Ashwell does not mean what he says. He is aware that the important duty to which he refers devolves upon the accoucheur, not when the liquor amnii has escaped, but *before* it has escaped, although the above sentence, taken alone, expresses the contrary opinion.

The author observes, that "some practitioners are very particular in their directions about the membranes, and we invariably attempt, by a very gentle withdrawal of the placenta, to secure the complete extraction of the secundines; thus obviating the subsequently painful contractile efforts to expel them, and at the same time removing a source of annoyance, in the offensive smell, to which, by their putridity, they may give rise."

The complete removal of the secundines, which is of much consequence, from the circumstances Mr. A. mentions, is rendered more certain by turning the placenta round once or twice in the act of extracting it. By this simple expedient the membranes are twisted, and are therefore less likely to break from the placenta, and to leave some portions still remaining in the uterus.

Mr. Ashwell adds his testimony to the almost invariable power of the ergot of rye in increasing uterine action. He does not promise infallible success from the use of it. He gives a brief and perspicuous summary of what is known of the powers of this remedy.*

* Mr. MICHELL's work on Difficult Labour, reviewed in our Number for August 1828, contains the most satisfactory body of evidence upon the use and efficacy of the ergot of rye.—REV.

Mr. Ashwell offers some judicious remarks upon tedious labour from rigidity of the soft parts. Unless in extreme cases, he would not abstract blood so largely as Mauriceau and Dewees have recommended.

"Were we called to a patient with rigidity, whose previous labours had been protracted from the same cause, we should consider venesection as the most important in the series of remedies. In rigidity, however, of a moderate kind, we should first empty the rectum, whose feculent accumulations frequently obstruct labour. The bladder should not be distended, and the erect posture, short of fatigue, may be maintained; every thing being avoided at all likely to produce fever. Tea, toast-and-water, barley-water, milk-and-water, or veal-broth, may be taken; and the apartment should be airy and cool. We have twice rubbed in the belladonna, as advised by Dr. Conquest, but without any benefit. We have many times been much gratified with the effect of opiate clysters, or suppositories, introduced into the rectum, even after opium had been taken internally without any apparently good effect. Opium should not be given until the bowels have been relieved; and, of course, if bleeding has been previously employed, it will be exhibited under the most advantageous circumstances." (P. 273.)

We by no means presume, with the author, that the long forceps will ultimately entirely supersede the short forceps.

In the following general observations upon instrumental assistance, we fully concur. We have seen many patients who have been allowed to suffer for hours, when the labour might have been terminated in a few minutes by the use of the forceps, with perfect safety both to the mother and child, with due dexterity and experience on the part of the practitioner.

"All instruments may be rendered dangerous, if too early and rashly used; yet we think that experience is decidedly in favor of the greater safety to the mother from their too early, than from their procrastinated employment. Rupture of the uterus, abdominal and local inflammation, terminating in gangrene and sloughing, irreparable exhaustion of the system, and a series of other events not necessary to be enumerated here, may all be occasioned by a too protracted difficult labour. Indeed, we are sometimes almost induced to believe that great evil has arisen from the multiplied and fearful associations which have been so invariably connected with the use of instruments. Some practitioners are thereby deterred from even thinking of their employment, till a period has approached when little good can be anticipated from their aid. Others consider it so superlatively difficult to determine the cases proper for their use, and the precise time and manner of their application, that they think it unnecessary to acquire a thorough knowledge of the principles on which instrumen-

tal labour can alone successfully proceed, not remembering that, in some instances, valuable lives may be entirely dependent on their sole and unaided exertions, and that, before they can obtain the assistance of another practitioner, their secret source of reliance, the proper moment for interference may have been finally lost. In the difficult operations of surgery, those of hernia and lithotomy, by way of example, the circumstances in which they are to be performed are fully stated, the dangerous occurrences attending their execution, and the methods of averting or of contending against them, if they do happen, are carefully described, and, having acquired a knowledge of every possible contingency, the operator is well prepared to meet every difficulty. Nothing beyond this is required in instrumental parturition. Let it be understood, that although very rarely, yet that sometimes artificial aid is necessary; that it behoves the accoucheur accurately to discover the nature of the difficulty opposing delivery, and how far it is likely to be overcome by the natural efforts; that, if he deliberately determines these to be insufficient, he is next to ascertain the precise situation of the child's head in reference to the pelvis; and if the os uteri be fully dilated, he may proceed by the forceps, as by a pair of artificial hands, to obtain a firm hold of the cranium. That, in their introduction, he is to be guided by certain directions clearly and simply taught; and, in the subsequent extraction, he is to act on principles arising out of the relations of the bony canal of the pelvis to the head of the child. That, in the performance of these duties, he may encounter greater or less difficulty, and in some instances the obstacles may prove insuperable; yet, if gentleness and caution be observed, and a strict regard paid to the axis of that part of the pelvis in which the difficulty exists, he may advance from the moderate to the higher degrees of contracting power, without any injury either to the mother or her offspring."

In offering our approval of the sentiments here expressed, we are very far from recommending a hasty recourse to the use of instruments: but to forbear from employing them when they are necessary, is quite as injudicious and discreditable to the practitioner as to use them when they are not.

Although every opinion stated by Dr. GOOCH deserves our serious consideration, we agree with Mr. Ashwell that the practice he recommends in flooding after the removal of the placenta ought not to be adopted as a general rule. Dr. Gooch states, "that, when hemorrhage occurs after the removal of the placenta, the quickest way to stop it is to introduce the left hand closed within the uterus, applying the right hand open to the outside of the abdomen, and then, between the two, to compress the part where the placenta was attached, and from which chiefly the blood is flowing." In answer to this, Mr. Ashwell prudently replies—

"I am aware that, in alarming and desperate floodings, any measure, however severe, is justifiable: the intention is to save a life which appears on the very point of extinction, and after consequences must yield to this momentous purpose. I do not deny that, as a 'denier resort,' the carrying of the hand into the uterus may be absolutely necessary; but I am equally convinced that the gripping or grasping pressure of the womb, commenced immediately after the birth of the placenta, when there is an habitual proneness to flooding, or when the contraction of the uterus is unsatisfactory, will generally supersede its employment. The introduction of the hand into the uterine cavity is always attended with risk, and it cannot be less so when, owing to the exhausted and powerless state of the system, the uterus and vagina may easily suffer rupture or laceration. It may be, too, urged against this practice, when it is performed during syncope or approaching collapse, that it must of necessity destroy coagula or clots, which are forming about the mouths of the bleeding vessels, and may thus originate fresh hemorrhage." (P. 448.)

Ample experience teaches us that Mr. A. has very judiciously qualified the rule of practice laid down by Dr. Gooch.

It behoves the student and junior practitioner to consider most maturely the various circumstances connected with the subject of uterine hemorrhage, that he may not have reason to regret his want of information at a moment when the life of his patient may be entirely dependent upon his presence of mind and prompt assistance.

In the fourth part are considered "the Diseases which belong to the Puerperal State." The following passage is worthy of attention:

"On visiting a patient a few hours after delivery, we shall almost invariably observe a slight but complete febrile paroxysm, characterised by quickness of pulse and general heat of surface; and, if stimulants be not administered, perspiration usually ensues, and in twenty-four, forty-eight, or seventy-two hours, the affection wholly subsides. I have known this condition produce unnecessary alarm, and I am convinced it has often, to the injury of the patient, prompted to the abstraction of blood and other unnecessary depletory measures. It ought, when moderate, to be regarded as a natural effect of the shock incident to parturition." (P. 453.)

The morbid occurrences of the puerperal state are but briefly touched upon. Upon this subject Mr. Ashwell has freely quoted from Dr. MARSHALL HALL's excellent publication on "some Diseases incident to the Puerperal State."

In an Appendix two papers are contained, relative to the "Surgery of the Abdomen," and on "Transfusion." For these communications Mr. Ashwell is indebted to Dr.

BLUNDELL. The plates in this work are neatly executed and will be found very useful to the student, in impressing upon his mind a clearer notion of the various positions of the foetus in utero than any verbal description could convey. They are principally, if not entirely, copied, upon a diminished scale, from the large work of SMELLIE. In the language of the printing office, the work is well "got up."

The author has achieved the object he had in view, of giving a brief summary of the various subjects upon which he treats. As a *preliminary* study, his work may be consulted with some advantage by those who fear to enter at once upon the perusal of other authors, who treat the same subject in a more comprehensive manner.

Commentaries on the Causes, Forms, Symptoms, and Treatment, Moral and Medical, of Insanity. By GEORGE MAN BURROWS, M.D. Member of the Royal College of Physicians of London, &c. —8vo. pp. 716. Thos. and Geo. Underwood, London, 1828.

(Concluded from page 544 of the last volume.)

EVERY page of Dr. BURROWS' work contains discussions of so much practical importance, that we very unwillingly pass over any part of it. But it would be impossible, within the ordinary limits of our analyses, to notice each of his very interesting commentaries. We have already exceeded our usual bounds, but still we have but skimmed along the surface. The volume itself must be perused, and maturely studied. It will be found not only to impart information upon the subject to which it is particularly devoted, but, from the reciprocal connexion between the brain and all other parts of the body, many general pathological views are incidentally noticed, which bear upon various other maladies as well as insanity.

Commentary III. "Delirium."—The author gives a summary of the opinions of various writers, who have endeavoured to draw a line between delirium and insanity. This distinction is very important, for, as different affections derived from different states of the brain, they require opposite modes of treatment.

Commentary IV. contains a succinct practical sketch of "Delirium Tremens." Dr. Burrows has met with several fatal cases. "In three of them which were examined, each dissection displayed considerable venous congestion and effusion of serum. In one man, who died very suddenly, between the membranes, in the ventricles, and the theca vertebralis, there was an immense accumulation of serum."

In respect to treatment, the author remarks

"I have treated such patients by opiates, and without any narcotic at all; and they have by both modes recovered in the time this disease usually occupies. Formerly, if the constitution were not broken down by a long-continued habit of intoxication, but on the contrary appeared rather full, I prescribed bloodletting from the arm; but never finding any corresponding benefit, I long since ceased the practice. Afterwards I tried abstracting smaller quantities of blood from the occiput or nape of the neck, by cupping; or from the temples, or behind the ears, by leeches, in order to reduce the cerebral action; and applied an evaporating lotion to the head. Moderate depletion and cooling applications will generally relieve and refresh a vigorous young patient; but must be cautiously adopted if an old one. As the bowels are often constipated, and the secretions bad, moderate purging is almost always indicated." (P. 332.)

The quantity of opium to be given must be regulated by circumstances. Dr. B. generally prescribes three grains in the first instance, and continues it in smaller doses every hour or two till sleep is obtained. If the disease is induced by a total deprivation of an accustomed stimulus, a little should be given now and then. Camphor is frequently useful as an excitant.

Commentary V. treats of the "Stages of Insanity." Other diseases which are properly called acute, if not interrupted, have their incipient stage, and, in succession, those of intensity and convalescence. Such diseases, also, may assume a continued, remittent, or intermittent form. "So likewise may insanity. Thus far, then, the analogy of insanity and acute diseases holds, but no further; for, though the former be an active disease, inasmuch as it runs through distinct stages, it cannot, in the sense in which acute is applied to other diseases, pretend to that character." (P. 340.)

For the philosophic division of insanity, as a corporeal disease, into stages or periods, we are indebted to the observation and discrimination of the celebrated PINEL, and it has been recognised by his successors. Dr. Burrows is convinced that the neglect or oversight of the different stages or periods of insanity, is the principal cause of the confusion, vacillation, and frequent disappointment in the remedial treatment of it. He therefore follows the example of the French pathologists, and describes the successive periods into which the disorder divides itself, and should be studied. It is frequently to be lamented that the physician is not consulted until it is too late to prevent the full development of the malady.

Commentary VI. "Puerperal Insanity."—Upon this very

interesting form of mental derangement, Dr. Burrows deduces from his experience, which has evidently been considerable, the following corollaries :

" 1. That mania is a more frequent consequence of lying-in, and the process of lactation, than any other variety of mental derangement.

" 2. That puerperal insanity occurs from the age of twenty to thirty, in the proportion nearly of two to one at all other ages.

" 3. That, in London, physical causes much more frequently originate puerperal insanity than moral causes; the physical being to the moral as ten to one. In Paris the reverse obtains, and the moral are to the physical as four to one.

" 4. That the access of puerperal insanity happens before the fourteenth day in three out of five cases.

" 5. That it happens between the fourteenth and twenty-eighth days in one out of about six cases and a half.

" 6. That nearly four in five recover their intellects.

" 7. That not more than half recover in six months.

" 8. That those recover soonest whose delirium supervenes on the process of lactation.

" 9. That the maniacal form ceases sooner than the melancholic.

" 10. That the mortality is apparently, but not really (as will be proved presently,) double Esquirol's return; and that the greater number of deaths occurred before the second week from delivery.

" 11. That half (and possibly more, if the truth could always be discovered,) attacked by puerperal insanity, prove to possess an hereditary predisposition." (P. 396.)

Dr. Burrows attaches but little weight to the cases of mortality reported by Esquirol. Not one of them occurred till more than six months from the access of the insanity, and in others, years had intervened. Puerperal insanity is considered to be a dangerous disorder, on which a very cautious prognosis should be delivered.

Treatment.—The actual situation of the patient must be kept in mind. DENMAN sensibly observes, that when a woman is recently delivered, the attending circumstances reduce her to the state of a person who has had a profuse evacuation of any other kind. Such patients may require depletion in different acute disorders, but they generally do not bear it well. Care must be taken not to mistake symptoms of excitation for inflammation, or muscular exertion for vital power.

" When called to a case of this nature which has occurred within the month following lying-in, I cannot too forcibly impress the remembrance that the puerperal patient is already reduced by parturition and its consequences; and that the process of lactation itself produces fever and considerable irritation, both of which will ordinarily subside in a few days, if the bowels be opened, and the

milk have a natural vent, or be duly carried off, when, from accident, suckling is impracticable." (P. 399.)

Influenced by these views, the author, of course, does not consider that depletion, or the reduction of strength, is the proper course to restore the equilibrium of those functions on which health and a sane mind depend.

"With pain I must acknowledge that I have too often found, when called to a case of puerperal insanity, that the sins of commission in the treatment of it have been infinitely greater than those of omission; for in most of them depletory measures have been pushed to an unreasonable extent, so that the issue was already perhaps determined before I was consulted, and no alternative left but death or long-continued insanity. And to this cause, I fear, must be ascribed a larger proportion of mortality consequent on puerperal insanity, than would result if a more cautious system of practice were adopted." (P. 399.)

Puerperal mania is exhibited in two forms, each distinct in their physical characters. In one the delirium is high, with ordinary excitation; in the other the delirium is low, with symptoms of cerebral disease, with coma.

"The first, if properly treated, is attended perhaps by little danger either of life or continued insanity: the second is attended by great danger under any treatment; and, if life be saved, it is commonly at the expense of reason." (P. 401.)

If the secretion of milk and the lochia are suspended, it will be desirable to restore them, if possible. Dr. B. has seen suppuration of the breasts prove critical, and many other abscesses.

When the insanity is fully developed, the first duty is to prevent the patient from injuring herself or others. The bowels must next be freely evacuated. If purging weakens, clysters must be employed. If the delirium is of a more determinate character, local bleeding on the occiput, vertex, temples, or behind the ears, and cold evaporating lotions to the head, will be necessary.

"The pulse, as well as the muscular movements, in this and in all other species of mental affection, as I have before remarked, is commonly referred to as the index of the strength of the patient. They are both equally fallacious signs, and must never be trusted in these more than in any other cases of insanity." (P. 403.)

The lower extremities must be kept warm. A foot bath, filled with a warm infusion of mustard seed or of horse radish, may be used with advantage. The use of opiates and blisters requires much discrimination. Determination or congestion of the cerebral vessels, and a costive state of the bowels, must first be remedied before opiates will produce the desired effect,

and even then cold applications to the shaven head will be the best and most certain soporific. Having attended to these preliminary measures, if the cold applications fail to produce the effect, opiates must be freely administered. Small doses only increase the irritation and delirium. Battley's liquor opii sedativus is preferred by the author. Upon more than one occasion we have expressed our favorable opinion of this form of opiate, particularly in cases where cerebral excitement was to be guarded against as much as possible. Blisters, either to or near the head, are not advised. "The only way in which I have thought advantage has been produced by them is as a derivant, when applied to the thighs or legs." Some physicians' ridicule the theory upon which this derivative treatment is founded, and doubt the efficacy of the practice which results from it. From frequent observation, however, we are convinced that blisters thus applied are serviceable in such cases, but prejudicial if applied to the head.

Care must be taken that some nutriment is got down, "for a sudden and most unexpected state of exhaustion frequently supervenes, and may carry off the patient."

The moral treatment must be conducted upon the same principles as in general insanity.

In the seventh Commentary, the author touches briefly upon that species of mental aberration peculiar to old age, and hence designated *delirium senile*, or *senile insanity*.

"The whole moral and intellectual character of the patient is changed: the pious become impious, the content and happy discontent and miserable, the prudent and economical imprudent and ridiculously profuse, the liberal penurious, the sober drunken, &c. Persons in whom the sexual passion has been long dormant suddenly become lascivious and obscene, and abandon themselves to all sorts of vices. In fact, the reverence which age, and the conduct suited to it, always commands, is converted into shame and pity at the perversion of those moral and social qualities which, perhaps, have hitherto adorned the decline of the patient's days, and endeared him to his family and friends." (P. 409.)

This form of disease develops itself in those who may never before have been insane, nor possess hereditary predisposition. The treatment must generally be purely palliative.

Commentary VIII. "Suicide."—Many contend that the remote causes of suicide exist always in some lesion or disease of the thoracic or abdominal viscera. Dr. Burrows does not dispute that this may sometimes be the fact, because he believes that it is so frequently where there is general insanity, without propensity to suicide. "But certainly neither in the

encephalon nor in other viscera has any lesion or disease been detected, which peculiarly characterises suicide." FALRET* infers that the affections of the viscera, in mental derangement, are always secondary, while the primary affection is in the encephalon. To this the author replies, very fairly, that

"If the viscera are affected secondarily from a morbid action or disease in the brain, I know not by what reasoning we should deny a reciprocal influence, and that the brain also may be secondarily affected. Although actual disease of the liver in cases of suicide be rare, and concretions are seldom found, yet a diseased hepatic action may exist, and the ducts in consequence be irritated by the passage of vitiated bile; and hence the brain, through the nervous influence, be sympathetically affected, and the mental depression prompting suicide induced." (P. 415.)

The strictest anatomical researches have elicited no other evidence than what corresponds with the general pathology of mental derangement.†

"Sometimes the patient makes no secret of this unhappy propensity. At this time a lady is under my care in whom insanity is hereditary. Her case is mania, alternating with melancholia, and when in the latter state the suicidal disposition comes on. She is perfectly conscious of her condition, reasons upon and laments her extravagant actions or gloomy ideas, and piteously begs she may not be trusted." (P. 421.)

It must be carefully remembered that these reasoning lunatics are not to be trusted. As a proof of the deliberate determination with which the means of self-destruction are obtained, the following facts are mentioned:

"A woman, named Wild, occupied several weeks in purchasing such small quantities of oxymuriate of mercury as to avoid the suspicion of her purpose. She then administered enough to her three children and herself as to cause the death of all of them.

"A gentleman obtained daily one grain of opium for eighty days, under pretence that he could not sleep without it. He then swallowed the whole with the intent of destroying himself."

Treatment of suicide.

"The medical treatment of the propensity to suicide, whether prophylactic or therapeutic, differs not from that which is applicable in cases of ordinary insanity. If suicide be the accompaniment of mania, or of melancholia, the remedies must be such as are suitable to those states of mental disorder, without reference to this specific symptom. The only difference is this, that in cases of insanity, when marked with violence, the precautionary means are to prevent mischief to others, and, when marked by disposition to

* *Essai sur le Suicide*. Paris, 1842.

† Vide page 529 of our last Number, for extracts from Dr. Burrows' work upon this subject.

suicide, to protect the patient himself; and that, in the latter case, a much greater degree of vigilance is necessary." (P. 449.)

Melancholy patients, it is said, have had the morbid association of their ideas broken, or long-continued hallucination chased away, by exciting some sudden and violent emotion. Dr. Burrows has never ventured to try the effect of surprises or fright. Before such experiments are practised on the insane, he cautions us "attentively to consider the state of the patient, especially that no cerebral congestion exists, lest apoplexy should close the scene."

The difficulty of determining when we may with safety place confidence in a convalescent suicide, must be obvious. Dr. F. Willis was once called upon for the utmost presence of mind.

"The late king desired one day to shave himself. Willis feared that, if he hesitated to give his consent, the king would see that he was suspected of an intention to commit suicide, and thus the idea of such an act would be engendered where it might not as yet exist. He promptly sent for the razors; but, before they could be brought, he engaged his majesty's attention with papers which were upon the table. The king continued so occupied with them, that his physician felt assured he entertained no design of the kind. After having shaved himself, he resumed his papers. The razors were not sent away immediately, lest the thought should come across the king that he could not be trusted. Such self-possession and tact would have been admirable in an ordinary case; but when we consider the rank of the patient, and the immense responsibility attached, we must own that Willis was endowed with exemplary qualifications for the trust imposed upon him." (P. 461.)

We recommend the whole of the commentary upon the dreadful tendency to suicide particularly to the attention of our readers.

We must pass on to Part V. which discusses the "curative treatment." The author professes no knowledge of an anti-maniacal remedy, nor does he offer the charm of novelty in his "plans or practices." His practice has been directed by those pathological views of the causes, nature, forms, and complications of insanity, which he has so extensively described. He conceives that every case of insanity should be considered as an insulated one, and so it must be treated. "Remedies, therefore, must vary with the constitution and peculiar features of each case." No fixed rules or formulæ can be given, or, if prescribed, be adhered to. Without any wish to defraud the moderns of what is owing to them in developing the causes, or improving the treatment, of insanity, the author considers it due to the ancients to acknowledge

that their practice was generally judicious, and that he feels more indebted to them than to the moderns for the success which has attended his efforts.

Like the causes of insanity, the curative treatment is usually divided into medical and moral; and first of the "*medical treatment.*" The first duty of the physician will be to make himself acquainted with the history of the patient and the case. Success in the treatment of insanity, as in other diseases, is always correspondent with the interval between the attack and the period when remedial care commences. It must be remembered that insanity is a purely corporeal disease, and, like other corporeal diseases, is amenable to medical skill.

"As the functions of the vascular or nervous system, in all cases of insanity, are disturbed, our skill should be directed, while a prospect of cure is entertained, to diminish the action of either system which may preponderate, so as to restore the lost balance.

"When the cause evidently exists in a structural or functional lesion of some remote organ, affecting the brain by sympathy, it is obvious that attention must be first directed to the organ so affected." (P. 578.)

The several stages which insanity pursues in its course testify that the brain, the organ of the mind, assumes different morbid conditions, first functional, and then structural; functional in the first three stages, structural or organic in the last.

"This pathological view must be our guide in prescribing.

"In the incipient stage, there is evidence of great vascular excitation and cerebral irritation, and this stage must be met by a correspondent treatment. Here are indicated repeated topical abstractions of blood from the head or contiguous to it, shaving the head and refrigeration so long as there is preternatural heat of the scalp; cautious general bloodletting, even in the plethoric and robust, very moderate in the delicate though young; purging; vomiting after the vessels of the head are unloaded and the bowels evacuated; nauseating doses of tartarised antimony, to moderate the circulation and excessive violence; the digitalis in gradually augmenting doses, till the pulse intimates reducing the dose; saline draughts, and moderate diet.

In the active or confirmed stage, the fury and violence of mania, or the despair of melancholia, with their concomitant mental delusions, may persist, yet the symptoms of physical excitation attending the incipient stage subside or intermit, and occasionally only return.

"When the symptoms of excitation recur, they must be treated as in the first instance, except that neither depletion by local or general bleeding, nor by any evacuants, should be so active or

copious. The system will not in this stage bear them so well; on the contrary, light tonics and the shower-bath are of great use, even when moderate topical bleeding and purging are indicated; and, when the exacerbation of a paroxysm ceases, more powerful tonics, as chalybeates, cinchona, cold bathing, and a better diet, are admissible. It should also be observed, that in melancholia the class of remedies which are designated anti-nervines are useful adjuvants.

"In the convalescent stage, if symptoms still denote cerebral congestion, gastric irritation or uneasiness, or intestinal irregularities, they should be attended to until they are removed. In this stage, moral treatment besides is especially indicated.

"I do not perceive that any particular advantage can accrue from giving specific formula of remedies in particular cases of insanity; for there are scarcely any two for which the same formula or dose would be suitable. Doses, like the remedies themselves, must be modified according to the constitution and peculiarities of the patient and symptoms of the case." (P. 580.)

It is important, says Dr. Burrows, to remark

"That cases of evident derangement of the intellectual faculties are sometimes met with, which, perhaps, on a very rigid examination, present no symptoms of corporeal disorder. All the functions seem regular, and there is no alteration in the external appearance, except, perhaps, a little more vivacity in the look, and a slight peculiarity in the eyes. There are persons in whom, invariably, the hereditary predisposition is inherent." (P. 581.)

If the word generally had stood in the place of "invariably," we should have offered no comment upon this passage. But two exceptions have fallen under our own observation to this absolute statement. In both, the patients have been insane for years. Not the slightest symptom of corporeal disorder has ever been manifested in either, with the exception of trifling rheumatic attacks from exposure to cold, in one lady. In neither of these persons was there any hereditary predisposition.

The various remedies that are commonly in use are now separately considered.

General bloodletting is in very general use. That it is much too inconsiderately and too indiscriminately employed, in this and many other cases, is a fact which, we believe, is daily attracting more observation. We trust, therefore, that the use of this powerful remedy will speedily be limited within more judicious bounds. "Many of eminent character among the moderns," says the author, "have doubted its efficacy; and experience has convinced me that, except in a very restricted sense, it is a practice fraught generally with mischief. Following example rather than experience, I tried depletion

by bloodletting for several years; but, discovering my error, I became more cautious, and I believe that I have scarcely ordered venesection in six cases of simple mania or melancholia in as many years. My conclusion is, that, since I changed my practice, more have recovered; and certainly the cases have been less tedious and intractable." (P. 583.)

If any urgent necessity impels copious abstraction of blood in mania or melancholia, the more prudent practice, we are told, is to effect the object with the greatest celerity. Bleeding from the feet or ankles is not to be much relied upon. In the opinion of the author, it is only where a real state of plethora exists, or apoplexy is pending, that general bloodletting in mental derangement can be justified. The pulse at the radial artery is not a criterion we can depend upon.

The blood drawn in mania rarely exhibits the indications of inflammation. The results of anatomical investigation do not support the theory of cerebral inflammation in mania.

The sweeping condemnation both of the lancet and cupping in insanity, which has been passed by Dr. F. Willis, is deprecated. Dr. B. replies, that it is possible the one may be required; and he is sure that the other, or leeching, can seldom be dispensed with in any recent case. Bloodletting is never admissible in long-standing insanity, except a *temporary* attack has come on, with symptoms of active cerebral excitement.

Topical bleeding the author considers safe, if employed with moderate prudence. "In every case of recent insanity which I have seen, and I do not recollect an exception, local abstraction of blood from the head itself, or contiguous, as the nape of the neck or between the shoulders, has been indicated. The mode has been by cupping or by leeches. Cupping on the occiput is to be preferred."

There is much diversity of opinion as to the propriety of repeating local bleeding.

"Some conceive that the object is attained by a single emptying of the surcharged vessels of the brain; others repeat it through exacerbation and remission, even into the continuous form. The latter course I hold to be dangerous, as likely to produce a permanent state of collapse of the brain. My practice is to repeat cupping or leeches as long as symptoms of great cerebral excitation prevail, especially while a preternatural heat of the scalp is felt; but, when they remit, to desist from drawing away blood, and repeat it only with the renewal of these symptoms. If premonitory symptoms announce an attack, local depletion will often prevent it. Mere raving and fury must not be mistaken for cerebral excitation consequent on vascular excitement. They are probably the effect of that cerebral irritation which is produced by an opposite condi-

tion of the brain, and would inevitably be exasperated by any kind of depletion." (P. 591.)

Local determination occurs in the weak as well as the strong, and tonics and stimuli may be required to keep up the general tone, while topical bleeding may be useful. We may be allowed to add, that this fact, which is too commonly unattended to, should frequently lead to a similar principle of practice in many other diseases, especially palsy.

Dry cupping is occasionally useful, where even the smallest quantity of blood could not be detracted with safety.

"The blood is by this means derived from the surcharged internal vessels to those of the external, all of which will be seen greatly distended from the operation; and it is there retained awhile, without being absolutely withdrawn from the circulation, to the relief of the brain." (P. 594.)

Refrigeration.—The utility of this remedy, where there exists a preternatural heat of the head, is confessed in all cases of cerebral disorder.

"The natives of a part of India have two curious, and probably primitive, modes of lulling young children to sleep. The first is by the operation of a constant stream of cold water pouring on the crown of their heads. The parents wrap up the bodies and feet of the children warm in a blanket, and place them horizontally in trays; they then expose the vertex of the head only to the cooling influence of a running stream, and thus certainly induce repose." (P. 597.)

The application of intense cold to the head in a chronic state of insanity, when the patient is noisy and violent, never induces quiescence and sleep. On the contrary, the brain being in a state of atony, cold then always becomes a source of irritation. The douche is not always safe, and requires to be used with precaution.

Gyrations and swinging.—"In the intermitting form of insanity, gyration has been found of particular benefit in checking the approaching paroxysm. When a great prostration of strength suddenly succeeds to the full motion of the swing, most advantage is expected. Its effect in lowering the circulation and temperature of the body is so immediate, that alarm for the consequences is generally created in those not accustomed to the use of it.

"Where sleep is the wished-for object, a slow and long-continued action of the swing, if possible, without affecting the stomach to vomiting, is to be kept up.

"Like every other antimaniacal remedy yet prescribed, it is acknowledged that this sometimes entirely fails in producing the

desired effect. Possibly, as it always occasions great apprehensions, its ordinary operations on the system are thereby counteracted.

"The operation of gyration, either vertically or horizontally, is strongly advised, as a moral as well as a medical agent in chronic cases; for, where no expectation of cure has been entertained, a few trials have produced a wonderful improvement in manners and behaviour.

"Where the degree of violence has been so great as to compel a rigid confinement, the patient has become tractable, and even kind and gentle, from its operation. The morbid association of ideas has been interrupted, and even the spell of the monomaniac's cherished delusion broken." (P. 602.)

Sleep.—The agents previously mentioned have all a tendency to induce sleep. It is here considered as a remedy in mental disorders. "Too much sleep (says our author,) disposes to all the disorders of a slow circulation, and to weakness and cachexy. In affections of the head generally, sleep does not alleviate; and it is possible that an abridgment of it in those afflicted with cerebral affections might even prove beneficial. However that may be, I am quite clear that there is commonly by far too great a solicitude to procure sleep in mental derangement." (P. 605.) The medical attendant should remember, that if the mean used to employ sleep be not indicated by the physical state of the patient, mischief follows its exhibition.

"A maniac awoke from sleep artificially obtained, is a giant refreshed. New activity is imparted to the sensorium, and his muscular powers are recruited. If he have lost by it one hallucination, another assumes its place, more wild, perhaps, and extravagant than the former, and his waking dreams are the more vivid: hence his violence and raving are increased, and the power of continuing them prolonged." (P. 607.)

Sleep, when caused by any of the above-mentioned remedies, is desirable. The slumbers that result from these means are calm, and the excitement and activity of the brain are diminished. Plentiful ingestion increases the afflux of blood to the head, and where it is deficient, as in the cachectic, it operates as an anodyne. "Thus, a hearty meal for supper has been found to induce refreshing rest in maniacs, where every other means has failed. This perfectly accords with a well-known law in physiology, where the brain is in that condition which long-continued insanity produces." (P. 608.) Such an experiment must, of course, be very cautiously made.

Narcotics.—The most opposite opinions exist as to the exhibition of narcotics in insanity. Dr. Burrows probably accounts truly for these contradictions, by presuming that

they arise chiefly from ignorance of the distinct stages which insanity assumes, or from not noting the exact state of the patient when the narcotic is given. Before opiates are administered, the system must be somewhat lowered, if the patient is of a full and strong habit.

"In the advanced stage of the disease, when, by local depletion of blood, vomiting, purging, and an antiphlogistic plan, the vascular excitement is moderated, or in cases of slight temporary delirium from some sympathetic affection, or those deliria which sometimes occur in weak and highly nervous people, from biliary derangements or some sudden moral affection, an adequate opiate will often at once remove the delirium. In delirium or mania from hepatic derangement, copious evacuation by the bowels ought to precede an opiate. In the delirium of simple nervous irritation and hysteric affections, provided there be no cerebral determination or congestion, (which, however, may always be suspected,) a sufficient opiate will carry it off. And should the blood-vessels of the head be evidently surcharged, they must be relieved before advantage can be expected from an anodyne." (P. 610.)

Weak opiates taken by the stomach are decidedly mischievous in mania. A large dose must be administered, attending to the above precautions, repeating smaller ones till the end be attained. To fix the maximum dose is impossible. Having mentioned the very large doses given by other physicians, the author observes,

"I have never ventured beyond five grains of purified opium as the first dose. In those cases where I have deemed an anodyne admissible, I generally begin with three grains, and repeat one every two or three hours. I have never in this way exceeded twelve grains; and if sleep has not then followed, I have desisted." (P. 612.)

Battley's liquor opii sedativus affects the head less, nor does it constipate so much as laudanum. The strength of this preparation Dr. B. does not consider greater than that of the tincture of opium. We have formed the same opinion from our own experience; yet there are many who assert, with its inventor, that it is much more powerful.

DUPUYTREN has lately published some remarks upon the efficacy of small doses of laudanum given in clysters, not only in traumatic delirium, but in what he calls nervous delirium. We have at this moment a patient under our care who suffers severely from some obscure disease of the bladder and uterus. Large doses of opium taken by the mouth have proved less efficacious in relieving her torture than a suppository of two grains of solid opium introduced into the rectum.

Hyoscyamus is useful chiefly in those cases of nervous

irritation which accompany great despondency, where it is necessary to obtain a state of quietude on which sleep may be expected to supervene. It neither stupefies nor constipates. Although we have used this medicine very frequently, the following remark has escaped us: "It is apt to produce a very dry mouth, and a blackish appearance of the tongue, which I have known raise alarm in those unacquainted with this effect of *hyoscyamus*."

Dr. Burrows has also tried, both in mania and melancholia, the extracts of *stramonium*, *aconitum*, and *belladonna*, as soporifics. "One grain of the former in furious mania has procured several hours' sleep, when other narcotics, in considerable doses, have not succeeded; but the patients, in all the cases, were infinitely more violent when they awoke. Nearly the same may be said of the two latter narcotics." (P. 618.) The same rule obtains in the use of all narcotics. They are not admissible during great vascular action or congestion of the brain, or a constipated state of the bowels.

The author makes no mention of the hemlock. We have found it useful in allaying very distressing restlessness of mind induced by great mental fatigue, when other remedies of the same class were not so beneficial.

Blistering "can never be serviceable in mania, any more than opium, where cerebral vascular excitement or congestion exists, till local or general depletion has preceded." If admissible at all, it is in the more advanced stages of insanity.

"But it is still preferable to excite vesication, where it is indicated in mania, by the application of a plaster composed of tartarised antimony and the common wax plaster. It soon occasions considerable heat and a crop of pustules, from which a discharge may be kept up or checked at will. This application might judiciously supersede cantharides in mania, since it produces all their good and none of their bad effects." (P. 621.)

Setons and issues.—The author has rarely met with a case where convalescence was the result of either of these applications. If retrocession of some cutaneous eruption has taken place, drains of these kinds may be useful. "Long established setons and issues hastily dried up have caused many cerebral affections, and insanity among them."

Artificial eruptions.—Tartarised antimony is the best agent for producing this effect. Dr. JENNER has spoken very highly of it.* Dr. Burrows has not met with the success he expected from this auxiliary. There are few cases in which he would venture to rub in this active preparation for weeks

* Letter to C. H. Parry, M.D. on the Influence of Artificial Eruptions.

together, as recommended by Dr. Jenner; "for it sometimes occasions very deep sloughs, which are not lightly to be treated in some cases of insanity."

Under the heads of bathing, purging, vomiting, nausea, salivation, digitalis, prussic acid, camphor, spirit of turpentine, tonics, tobacco, diet, and resistance of food, many good practical remarks are contained.

The fourth Commentary of this Part considers the moral treatment.

The volume concludes with a few hints upon medical evidence in cases of insanity.

The opinion we entertain of Dr. Burrows' book is expressed in the length of the analysis which we have given of it. We have rarely, indeed, had a more troublesome task; for every page is so pregnant with practical information, that we have had much difficulty in determining what parts we could pass over with propriety. Although we have devoted three articles to the consideration of the work, and have given, we hope, a more satisfactory sketch of its general merits than any of our contemporaries, we beg to impress upon our readers the absolute necessity of attentively studying the very masterly delineation which Dr. Burrows has given of that most important of subjects, mental derangement. Dr. B. has modestly observed, that he offers no novelty; he has merely collected facts. To this we reply, in defence of himself against his own concession, "*Si nihil dictum quod non dictum prius, methodus sola artificem ostendit.*"

COLLECTANEA.

Floriferis ut apes in saltibus omnia libant,
Omnia nos, iidem, depascimur aurea dicta.

PHYSIOLOGY.

Central Point of the Nervous System.—M. FLOURENS recently presented to the Academy of Sciences in Paris a Memoir entitled "Experiments on the Semicircular Canals of the Ear in Birds."

The author began by adverting to two Mémoires, not presented to the Academy, but published in the *Annales des Sciences Naturelles*, for January and February last. The object of the first is to determine with precision the limits of the central and vital point of the nervous system.

It results from his experiments that this point commences at the origin of the eighth pair of nerves, and extends over the space of a few lines only. By cutting the cerebellum below this point, its vitality ceases, yet the medulla spinalis is unaffected. Cut the spinal marrow below the point in question, and it dies. A point then exists in the nervous centres on which depends the

life of all the other parts. This point is between the spinal marrow and cerebellum, the very centre of the nervous centres, (*au centre même des centres nerveux.*) It suffices that a part be united to this point to preserve its vitality: its death is the inevitable consequence of disunion.

Reunion of the Ends of different Nerves.—In the second Memoir, M. Flourens, after having repeated the experiments of FONTANA, of MONTANA, of CRUICKSHANK, and of others, on the reunion of the divided extremities of the *same* nerve, sought to determine the effects resulting from the union of the ends of different nerves. He therefore placed them in contact, and so kept them. In every instance the reunion took place. In some of the cases the return of the function was complete; in others it failed. In all, the transmission of irritations by the united nerves was perfect.

Effects of the Section of the Semicircular Canal of the Ear in Birds.—This is the immediate object of the Memoir now read.

The semicircular canals in birds are two vertical and one horizontal, which, with the vestibule and cochlea, form what is denominated the labyrinth, or internal ear.

In pigeons, the greater of these canals is the superior. It is vertical, and obliquely directed from behind forward. The middle is horizontal. The inferior is vertical, and directed from before; backward it crosses the horizontal.

M. Flourens, having successively made the section of these canals without producing the death of the animals, observed the following effects, which continued in many of them for nearly the space of twelve months.

1. The section of the *horizontal* canal of *both sides* is uniformly followed by a violent horizontal movement of the head. The section of the vertical canal, whether superior or inferior, of *both sides*, is followed by a violent vertical movement of the head. Finally, the section of *both* the horizontal and vertical canals produced both the vertical and horizontal motion of the head.

2. The section of a canal *on one side only*, whatever be the canal cut, is accompanied by the motion of the head in a much smaller degree than when both sides are cut.

3. The section does not destroy life, but the effects above mentioned remain during the life of the animal.

4. The principle of this effect resides in the membranous lining and nervous expansion of the canals.

It is, says M. Flourens, an extraordinary fact that parts so small and of such delicate structure, should exercise so powerful an action on the animal economy; and it is equally so that parts, whose functions appear to be specially confined to the purposes of hearing, should have so marked an effect on the movements above described; and, finally, that each of the parts determines a motion in conformity with its own vertical or horizontal position. Thus, the horizontal section produces a horizontal motion; the section of the vertical is followed by the vertical motion.

PATHOLOGY.

Ulceration and Perforation of the Duodenum. By M. ROBERT, Dresser at the Hôtel Dieu.—Louis Laurin, æt. seventeen, a shoemaker, and of a lymphatic constitution, had complained for several months of wandering pains at the

epigastrium, accompanied six weeks with diarrhoea, and during the last ten days with anorexia, nausea, and general uneasiness. December 10th, 1837, after a meal rather more copious than ordinary, he suddenly felt an excruciating pain, which, commencing in the region of the stomach, soon extended over the whole abdomen, and caused him to vomit, first his food, and afterwards a sort of mucus covered with bile. A physician, who was immediately called in, thought the patient was affected with indigestion, and prescribed for him some camomile infusion, an anodyne enema, and cataplasms to the belly. During the night he remained in the same state, and had no alvine evacuations.

Next morning he was removed to the Hôtel Dieu. His countenance was pallid and altered, his skin covered with a cold sweat, his pulse frequent and small, his abdomen very painful and tense, his tongue pale and moist, and bilious vomiting occurred from time to time. Fourteen leeches were applied to the belly, and afterwards emollient fomentations, but with no benefit: for the patient died at four in the evening, after having suffered about twenty hours, dating from the invasion of the peritonitis.

On opening the body forty hours after death, the abdominal cavity was found distended with gases, and a serous, reddish, and very fetid fluid. The peritoneum, deprived of its natural appearance and suppleness, exhibited in divers points a red colour, disseminated in striæ or plates; and for the most part it adhered but slightly to the muscular coat of the intestines, from which it could be easily separated. In some places there was subperitoneal emphysema. The posterior cavities of the omenta contained no serous effusion, (*l'arrière cavité des épiploons*;) the intestinal circuvolutions were slightly agglutinated together. The mucous membrane of the stomach appeared sound. At the origin of the duodenum, immediately beyond the pylorus, there was an oval ulceration, three or four lines in diameter, with perpendicular edges, rather puckered, and of a greyish hue; the bottom of it was closed by the peritoneum, which had acquired a yellow tint, and presented a perforation a line in diameter, through which the peritoneal and intestinal cavities had free communication. Near this was discovered another ulceration, as large, but more superficial, since it did not penetrate beyond the mucous membrane. The rest of the alimentary canal was in a healthy state.—*Archives Generales de Medecine*.

Suppuration of the Spleen.—In the *Observatore Medico* for July, we find the following account:

Dominick Rotunno, ætat. twenty-nine, a miller of Genosa, near Tarentum, for some time had been affected with obstruction of the spleen subsequently to an intermittent fever. By excess of food and exercise, the tumor became larger and more painful, and ultimately was considered, by Dr. GAETANO GLIONNA, a well-marked case of splenitis. The disease acquired force, despite of venesection, and the abundant use of leeches, purgatives, and emetic tartar; the pain and tension of the hypochondrium increased, and were accompanied with rigors, succeeded by heat and nightly sweats, &c. The induration of the spleen now disappeared, and, augmenting in size, it became soft towards its inferior part, and assumed the general appearance of suppuration. Recourse was immediately had to emollient cataplasms; and the fluctuation was so evident in six days, that it became necessary to open the tumor directly. This was done by plunging a trocar into its centre, which

was four inches from the linea alba. Nearly three pounds of very fetid pus flowed out instantaneously: it was rather firm, and at first of a dirty white, and afterwards of a reddish colour. The patient experienced immediate relief. The wound was kept open some days, but was quite healed in the course of a week; and Rotunno, entirely cured of his complaint, soon recovered his embonpoint and healthy appearance.—*Ibid.*

Imperforation of the Vagina. By Dr. CABARET, Basse Maison, near Gloubaray.—Marianne H., æt. twenty-one, of a robust make, had suffered, during five years, pains in the hypogastric region, with borborygmus and other hysteric symptoms, and had never had the menses. These various symptoms were successively combated by emmenagogues, antispasmodics, and the application of leeches to the superior and inner part of the thighs; but none of these means produced any salutary change.

It was then that the patient determined to consult Dr. Cabaret, and she accordingly did so in the beginning of April, 1825. On feeling the hypogastrium with attention, he fancied he could distinguish a very voluminous tumor in the situation of the uterus, which at first induced him to believe that the young woman was really pregnant, and attempting to deceive him; but her good character, and the assurance which she gave of never having menstruated, soon led him to adopt a different opinion. On minutely examining the parts of generation, he discovered a thick membrane, by which the vaginal orifice was completely closed. The incision of this membrane was evidently the indication to be fulfilled, which operation Dr. C. executed thus: Having placed the patient in a convenient posture, he separated the labia with the index and middle fingers of the left hand, and with a bistoury in the right, he made a crucial incision. Four pounds of blackish blood, mixed with some extremely fetid coagula, immediately issued forth. Some lint was introduced between the divided edges, to prevent their adhesion; and the next day injections were thrown into the vagina, for the purpose of dissolving and bringing away any coagula of blood which might still remain there, and fresh lint was introduced, and kept in situ by a suitable bandage.

The hypogastric tumor had entirely disappeared, and likewise all the symptoms which it occasioned.

By continuing the same dressing for a fortnight, Marianne H. was thoroughly cured, and she has ever since enjoyed healthy and regular menstruation.—*Ann. de la Med. Phys.*

Lachrymal Calculus. By M. KRIMER.—A woman, in her thirty-second year, having been for nine months affected with fistula lachrymalis, applied to M. Krimer. By introducing a probe into the fistula, he discovered that the lachrymal sac was not ulcerated, but the nasal duct closed by a hard substance, which he imagined to be an exudation of osseous matter. He vainly attempted to remove the obstruction by forcing a passage with a pointed probe. Upon endeavouring, however, to withdraw the instrument, he met with a resistance for which he was at a loss to account; and, when he had at length extricated the probe, he was not a little surprised to find a calculus, of the size of a pea, adhering to its point. The nasal canal, being again explored, was found quite pervious, and was for a fortnight kept free by the introduction of a bougie. Afterwards the wound was allowed to cicatrize.—*Græfe and Walther's Journal.*

PRACTICAL MEDICINE.

The Efficacy of Liquor Ammonia in Cases of Intoxication.—A mendicant, between twenty and thirty years old, and nearly in a state of idiocy, entered a public-house where several young men were assembled to drink. They diverted themselves by supplying him with wine and brandy till thoroughly intoxicated, and, scarcely able to stagger a few paces, he fell down apparently dead. He remained two hours in an alarming state of insensibility, in despite of various means employed to rouse him. His case seemed to offer a favorable opportunity for ascertaining the merits of the volatile alkali. Eight drops of the Liquor Ammonia were given to him in a glass of cold water, but of this a quarter was spilt, owing to his difficulty of swallowing. From the moment it was given to the patient he appeared somewhat convulsed; shortly afterwards, he was observed to stretch himself; before five minutes had elapsed, he sat upright, and was entirely recovered from the lethargy in which he had been absorbed. His eyes were fixed, and resembled those of a person suddenly awaked from a dream. He sighed several times, shed some tears, stammered out an excuse, and was in a few minutes strong enough to return home, leaning upon the arm of one of the bystanders. In the course of an hour he was quite restored, with the exception of a slight degree of torpor which still remained. It was thought proper to try the effects of a second dose of ammonia, and four more drops reestablished him.—*Journal de la Soc. Royale de Med. Chir. et Pharm. de Toulouse.*

Symptoms of a Convulsive Epidemic similar to that which now infects the City of Paris.—The winter of 1769-70 was prolonged far into the spring, and the previous summer was noticed for the variety of its temperature and its fluctuations of heat, cold, and moisture. The disease began in the month of September, but its severity was more manifest in the spring. In some the attack was sudden and rapidly fatal, which differs from the present epidemic. The second was of a more chronic species, was also more violent than that of the present period, but possessed many points of resemblance to it.

The disease in this form was preceded by weight and numbness in the arms and legs. The patients were depressed in spirits, and experienced uneasiness about the stomach; about the same time, a sense of formication all over the limbs. Unless the symptoms were arrested by suitable treatment, they continued to increase. The colour of the skin was yellow, or earthy. The appetite was invariably good, sometimes voracious at the end of the disorder. Spasms took place in various parts of the body, principally in the forenoon. Rigidity and numbness of the fingers were among the symptoms, and, as long as this continued, whatever abatement might be experienced in other respects, the patient carried about him the essence of the disease; or, to use the words of the analyst of the original work, “le feu couvait encore sous la cendre.”

The patients, even in their tranquil moments, had dilated pupils and weakness of vision, and at the same periods tremblings of the arms were remarked, in those especially who had been frequently bled.

When the spasms had frequently recurred, the ends of the fingers and toes became so insensible that the patients could handle lighted coals without feeling the heat.

The disease never terminated by gangrene, but the epidermis disquamated in different parts.

Treatment.—After emetics and purgatives, among which calomel appeared to have the best effect, TAUBS had recourse to calmants: the most efficacious was a mixture of six gros of camphor, a pint of good vinegar, and three ounces of extract of Genièvre; two tablespoonfuls were given every two hours.

Decided benefit was experienced from the use of Hensler's powder, composed of equal parts of Calamus Aromaticus, Galanga, Pied de Veuve, and wild Valerian, with a small portion of rhubarb and of camphor.

One patient was snatched from the jaws of death by musk.

Opium procured only temporary relief. Leeches were useful in dissipating pain in the limbs which were affected by spasm.

Frictions with essence of turpentine, and electric shocks, were successfully employed to remove the numbness and insensibility of the feet and hands.—*Die Geschichte des Kriebel krankheit, &c.* Gottingen, 1782. See also *Commentarii de Rebus in Scientiâ Naturæ et Medicinâ gestis*, t. 25. p. 582.

In 1588, 1593, and 1596, a similar disease reigned in Silesia, and is thus described in a treatise entitled "*De Morbo Convulsivo, Maligno, et Epidemico*," inserted by GRÉGOIRE HORST among his "*Observations*," tome ii. p. 299.

The patients experienced at the commencement a pricking in various parts of the body, as if thousands of ants were traversing them. Cramps were felt, accompanied by intolerable pains. The symptoms sometimes arose spontaneously, at others were preceded by vomitings of viscid matter, which nevertheless was unaccompanied by pain in the stomach, or any other gastric symptom. The affection was sometimes confined to the limbs for several days, and even months; but in some cases it extended to the head, producing convulsions and epilepsy. The spasms sometimes affected the respiratory organs, so as to cause apparent death. The prolongation of the malady brought on tumefaction of the feet, with phlyctenæ, from which a copious discharge of ichor was produced.

HOFFMAN notices similar epidemics; and our countryman WILLIS describes one in his treatise on *Morbis Convulsivis*. In 1702, it overran the whole country of Frieberg. In 1716, it desolated Saxony and Lusace, spread itself into different parts of Germany, Silesia, Wirtemberg, and Bohemia.

MULLER gives a good description of the same disease in his "*Disputat. de Morb. Epidem.*"

SURGERY.

Remarkable Superiority of Amputating by one Incision through the Integuments and Muscles.—This great improvement in the mode of amputating, which was formerly recommended by LOUIS, and unaccountably abandoned, is practised and highly recommended by all the present surgeons of the Hôtel Dieu, M. DUPUYTREN, M. BRESCHET, and M. SANSON. In thighs removed by the two former, and an arm by the latter, no tourniquet was employed in either case. The limb was grasped by an assistant, and pressure made on the principal artery. A single incision cut through skin and muscles down to the bone, and a retraction of the skin and muscles not inserted in the bone was effected to the extent of three inches. The first retraction having been completed, the muscles attached to the bone were cut through by a scalpel, on a

Erysipelas Phlegmonodes—Report of Diseases. 81

level with the others, and the bone sawed as usual. The stumps in all were remarkably fine, and the extremity of the bone was more than sufficiently covered.

After each operation, the surgeons respectively explained their reasons for preferring this procedure, whose expediency was proved by the result of every case in which it has been tried of late. To say nothing of the discarding of the tourniquet, which enables the operator to effect a retraction of the muscles to a greater extent than under its use; the old method of preserving the skin by cutting it up from the muscles to which it naturally adheres, was a considerable impediment to union by the first intention.

Erysipelas Phlegmonodes treated by Compression. By M. BOUGON.—This practice, which originated with some of the most eminent of the French surgeons, continues to be employed with success at the Hospice de Perfectionnement.

A woman, sixty-five years of age, was received with a leg swollen, painful, and of a red colour verging upon brown. The pain was increased on pressure; the redness was not diminished by it; and the subcutaneous cellular texture felt like dough. The knee was also swollen, and the synovial membrane appeared to contain liquid. The inflammation soon extended to the thigh. The decrepitude of the old woman contraindicated the use of evacuates; M. Bougon, therefore, ordered compression of the entire limb to be methodically made, and renewed whenever the bandages might become loose. The pressure at first produced pain, which was speedily dissipated; and this extensive phlegmonous erysipelas, which took place in a subject most favorably disposed for its passing into a gangrenous state, happily terminated by resolution.

CASE II.—An old man, sixty years of age, had both legs of an extraordinary bulk; the skin was tense and painful, and of a brownish red colour, which did not disappear on pressure. Two bleedings were performed on account of supposed tendency to apoplexy, but they had no effect on the erysipelas. Methodical compression of the limbs by bandage was had recourse to, whereby they were cured in six days.

INTELLIGENCE.

MONTHLY REPORT OF PREVALENT DISEASES.

The extraordinary mildness of the present season has given a character to the diseases which have prevailed. Dyspeptic complaints have been more than usually abundant, partly owing to the damp and close state of atmosphere, and partly, perhaps, to the circumstance, of those subject to indigestion having been less tempted to take the necessary proportion of air and exercise. Rheumatism in a chronic form has also been very common, and owing in a great measure to the same circumstances. Fever has likewise been met with, perhaps rather more frequently than usual; but the cases which have fallen under our own observation have not been of a severe character. On the other hand, the acute inflammations which usually present themselves about this period, have scarcely been seen, or, if so, only in individual instances.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,—In the report of the trial of COOPER versus WAKLEY, there are some questions in the cross-examination of Mr. LAMBERT, which imply that I had delivered several demonstrations, and also a lecture, with the view of showing that Mr. B Cooper's operation of lithotomy was unskilfully performed. As this imputation has been widely circulated through the medium of the press, I am desirous of refuting it in the most public manner, and I therefore trust you will give insertion to the following statement in your next number. In consequence of receiving many applications from gentlemen attending my lectures, who were subpoenaed on this trial, to describe to them the anatomy of the perinæum, I delivered a lecture, which was numerously attended, and among those present were several students who had been called on to give evidence, both by the plaintiff and defendant. In that lecture I pointed out the anatomical relations of the perinæum and neck of the bladder. I also gave several demonstrations in the dissecting room, in the usual routine, on the same parts. But in thus discharging what I considered the imperative duty of an anatomical lecturer, I studiously avoided all allusion to the operation performed by Mr. B. Cooper. On Saturday morning last I read the above report in the Morning Herald, and I felt anxious to have an opportunity of stating these facts in court. I therefore made an application through Sir A. Cooper to that effect, but I was informed by him that it was too late. Under these circumstances, I had no alternative but to publish the letter which appeared in the Morning Herald of Monday. In the evening of that day I received the following letter from Sir A. Cooper; and, by his kind permission, I insert a copy of it.

"Conduit street, Dec. 15, 1828.

"MY DEAR SIR,—You have done exactly as I wished, in publishing your letter. All the evidence on the part of the defendant had been examined, and I, who am ignorant of these matters, believed that it was impossible to retrograde. By sending your letter to the press you have completely exculpated yourself.

Believe me, with real esteem,

Yours always, most truly,

ASTLEY COOPER."

In conclusion, I have only to add, that my colleague, Mr. PILCHER, has requested me to state, that, in the demonstrations which he has given, he has carefully abstained from all comment on the above operation.

I am, Sir, your obedient servant,

R. D. GRAINGER.

Broad-street Buildings, Dec. 16, 1828.

Epidemic of Gibraltar.—M. MOUREAU DE JONNES lately read, at the Royal Academy of Sciences in Paris, a paper on the yellow fever, which prevails at present at Gibraltar. According to the statements of this gentleman, the disease has been imported by a Swedish vessel, admitted after quarantine to discharge its cargo, although it had been refused admittance into the southern parts of Spain. This vessel arrived in August, but the fever was only communicated in September; and it was about the 6th of the month that the governor decided upon making known the infectious nature of the disease. From that period the usual senatory measures employed in such cases were taken throughout all Andalusia. This explanation of course assumes the con-

tagious nature of the disease itself, which we should be inclined to doubt. We perceive, also, that a commission, consisting of three physicians, MM. Chervin, Trouseaux, and Louis, has been sent from Paris for the purpose of studying and reporting upon the nature of the disease.

We are happy to learn, that by the latest accounts, (dated Nov. 30,) a favorable change had occurred in the weather, and brought with it a mitigation of the epidemic.

No doubt is entertained of its being the same kind of epidemic as that which prevailed in 1803 and 1813-14. The symptoms are fever; severe pains across the loins; tenderness in the epigastrium; headache; great prostration of strength; suffusion of the eye; yellow tinge of the skin, and black vomit. The disease generally runs its course in from three to five days.

SURGICAL PRACTICE AT GUY'S HOSPITAL.

Cooper v. Wakley.—This case, which was specially appointed for this morning, excited the most intense interest.

The defendant was charged with having published in the *Lancet*, a libel, imputing to the plaintiff, Mr. BRANSBY COOPER, the unskilful performance of an operation of lithotomy, which took place at Guy's Hospital in March last. The defendant pleaded several special pleas of justification, setting forth the matter charged as libellous, and averring that the whole of it was true.

The libel appeared in numbers 239 and 240 of the *Lancet*.

SIR JAMES SCARLETT, Mr. POLLOCK, Mr. PLATT, Mr. SCARLETT, were for plaintiff. The defendant pleaded his own cause, assisted by Mr. BROUGHAM and Mr. KELLY. A long argument ensued between the defendant and the counsel for the plaintiff, as to who should first address the Court. The Lord Chief Justice consulted with his brother Judges in the Bail Court, and returned in about ten minutes, when he stated their opinions to be, that the task of beginning was upon the defendant.

Mr. WAKLEY then addressed the Jury. The report in the *Lancet* was not that of a supposed, but of a real operation; and was neither false, malicious, nor calumnious. Guy's Hospital was established not merely as a charity, but was also intended to be a great school for teaching surgery. It had been instituted by Mr. Guy, with an ample endowment, and 200,000*l.* had been subscribed to it. The funds belonging to the Hospital were immense, and it was of the utmost importance that it should be conducted on the best possible principles. Mr. Bransby Cooper had been elected Surgeon of that Hospital, and he was responsible to the public for the due execution of the duties of that important office, and had no right to complain, when his manner of performing his duties, as Surgeon of the Hospital, was freely canvassed before the public, provided it were done fairly and justly. The great injury was the injury done to the public, when incompetent men came forward and undertook these most serious and important duties; for how could they teach others to perform these operations skilfully, who were themselves unskilful? Mr. Wakley then called and examined his witnesses.

Mr. HOLDIMAN PARTRIDGE, of Colchester—"I am a member of the College of Surgeons. I have been in practice more than fourteen years; have witnessed many operations in lithotomy, and have performed them myself sixteen or eighteen times. I witnessed the operation performed by Mr. Bransby Cooper at Guy's Hospital in March last. The report of that operation in the *Lancet* struck me at the time to be correct, and I have no reason to alter my opinion. The patient appeared a very healthy man. I think Mr. Cooper himself introduced the staff; but the second incision was made without the staff. After the first external incision, all instruments were withdrawn. The hands of the patient were tied to his feet, and his knees to his neck, as represented by the model now produced. The patient remained in that position nearly an hour. During that period a sound was repeatedly introduced. Several cuts were attempted to be made into the bladder with a knife. This instrument (a cutting gorget) was introduced into the wound.

A blunt gorget was also introduced, and the scoop and several pair of forceps. During the operation the patient called out several times to the operator to desist. The operator stated several times that he could not explain the difficulty. I cannot say that I think Mr. Cooper performed the operation in a scientific manner. I do not think that it was performed in such a manner as the public have a right to expect from a surgeon of Guy's Hospital. The average time for performing operations of this description is four or five minutes. The operation in question occupied, I think, nearly an hour."

In his cross-examination by Sir James Scarlett, the witness stated his opinion, that Mr. Callaway, who assisted in the operation, was a man of great skill. Where the stone lay above the pubis, witness had always successfully extracted it in the way ultimately adopted by Mr. Cooper. Witness was asked, whether he thought the words in the libel, "the knife was carried onwards somewhere," did not convey an idea that the knife did not go into the bladder? He thought it meant that it might or might not have entered. He would neither contradict or affirm that the forceps were a second time used with considerable force.

Mr. JOHN CLAPHAM witnessed the operation, and the report in the *Lancet* was correct, as far as he recollected.

Cross-examined.—He should think Mr. Callaway a competent judge of operations of this kind. Witness admitted that he had made a false representation of his age to the Company in obtaining his certificate. Lord Tenterden instantly stopped his evidence, and witness withdrew.

Mr. JOACHIM GILBERT, a member of the College of Surgeons, witnessed the proceedings of Mr. Cooper for about thirty-five minutes, and he could not endure to stay any longer. The operator used great and unnecessary violence. He passed the forceps four times following after he had failed to extract the stone, passed his finger into the wound, and then poked a pair of crooked forceps about in it. After passing them three times, he called for "Sir Astley's knife," and made a cut with it, and passed his finger into the wound; and in so doing used violence, twisting the finger about in the wound.

Cross-examined.—Witness is assistant to Mr. Phelps, who married the defendant's sister. The first incision made was rightly performed. Witness never performed the operation of lithotomy; but had witnessed at least fifteen operations of the kind at Guy's Hospital. The operation of lithotomy requires greater skill than tying the subclavian artery. A very ignorant surgeon might, by accident, tie the subclavian artery with success.

Mr. JOHN THOMAS saw part of the operation. His testimony respecting it was similar to that of the last witness.

Mr. JEFFRY PEARL saw the operation performed. The report in the *Lancet* was correct, except that Mr. Cooper asked for "Sir Astley's knife," and not for "my uncle's knife," as stated in the report. There was no gush of urine as usual, but merely a trickling. [The witness was examined to various minute facts, deposed to by some of the preceding witnesses, and, in part, corroborated their testimony. He also spoke to the violence used as described by those witnesses, and stated, that three fingers at once were introduced.]

Cross-examined.—Witness never performed lithotomy himself. Mr. Lambert introduced him to the defendant. At that interview, the defendant asked witness whether the report was correct. The defendant and Mr. Lambert endeavoured to show that the forceps had passed between the bladder and the rectum.

Mr. JAMES LAMBERT stated that he furnished the report to the defendant. The witness then described the circumstances attending the operation nearly in the words of the libel; after which he described the appearances of the body of the patient after death. I do not think Mr. Cooper a good operator, but I once saw him tie the subclavian artery in a very skilful manner. That is not a difficult operation to a man who has any nerve. I do not think Mr. Cooper's abilities are adequate to the office of surgeon to Guy's Hospital.

This witness underwent a long cross-examination. He was admitted a surgeon three years ago. Derived considerable emolument from contributing to the *Lancet*, but not more than from his own profession. Had once an angry altercation with Mr. Cooper. He had been refused admission to Guy's

Hospital and St. Thomas's on account of the report. Was expelled from Middlesex Hospital four years ago, because he then became connected with the *Lancet*.

Mr. ALEXANDER LEE was the next witness. He considered the report correct, but written very unprofessionally. No surgeon of experience would venture to give an opinion without speaking to the operator. Next to the operator the person most competent to give an opinion is the assistant-surgeon. The mode of operating for the stone is not settled in any country, and any surgeon uses what instruments he pleases.

On his cross-examination, the witness said he was a clerk, and had been a potatoe merchant some years ago.

Mr. BOLTON, a pupil, gave evidence similar to that of the preceding witnesses.

Mr. HARRISON, treasurer to Guy's Hospital.—Mr. Cooper was elected assistant-surgeon, and Sir Astley Cooper consulting-surgeon, on the 14th May, 1825. Mr. Cooper was demonstrator under his uncle, and gave great satisfaction. He was recommended by all the surgeons in the Hospital. Sir A. Cooper did not know that the Hospital intended to elect his nephew, till I informed him of it. I knew that Mr. Cooper had served in Norwich Hospital, and also as army-surgeon in Spain, under the Duke of Wellington. He likewise served in the same capacity in Canada, at the close of the American war. He afterwards studied at Edinburgh for two years. He then came to Guy's Hospital. Mr. Cooper has always maintained the reputation which induced the Hospital to elect him.

Mr. WAKLEY then proposed to put in the preparations taken at the Hospital, as part of his case. The preparations were then brought into Court, and were examined by several medical gentlemen.

Mr. HOLDIMAN PARTRIDGE examined.—“I have examined these preparations. Whilst they are in the glass I cannot see the incisions. I see the opening in the bladder. I cannot give any reason why the operation should have lasted an hour, without having the preparations in my hand; and I would not like to give a decisive opinion on the subject without having examined them by myself.”

Mr. WAKLEY said that his case was now closed.

SIR JAMES SCARLETT addressed the Jury for the plaintiff. The attack in the *Lancet*, he contended, was one of the most injurious that ever falsehood or malice invented. The plaintiff was, as it were, put upon his trial, and the gentlemen of the Jury could scarcely be aware what it was that the plaintiff had to complain of, unless, indeed, they might have read it in the Evening Papers of yesterday, in which it was given with a curious exactitude, which could only be accounted for by supposing that it was furnished either by the defendant or his attorney. Thus, according to the forms of law, the plaintiff, who is the party complaining, even upon the threshold of that Court, the sanctuary of justice, meets with the dagger of the assassin, and before he can utter a cry of complaint, the weapon is struck deeper and deeper into his side. The learned counsel then gave a sketch of the professional career of Mr. B. Cooper in Spain and Canada, and contended that his education and experience were such as to justify his being chosen as surgeon to Guy's Hospital. The learned counsel dwelt largely on the opportunities which the plaintiff had, under the auspices of Sir A. Cooper, of acquiring the most intimate knowledge of the most abstruse parts of his profession. Sir A. Cooper would never have had the plaintiff as his assistant had he not been convinced of his capability, for then he would have risked his own character in his private practice. From this it might fairly be presumed that no private motives of friendship could have led to the plaintiff's being thus engaged, and that it could be only his skill which led to such an employment. The libel intimated that Mr. Cooper was chosen surgeon of the Hospital because he was the nephew of Sir A. Cooper; but the defendant, by his witness, Mr. Harrison, had proved the very reverse. He should call the other surgeons of the Hospital, who, abandoning all spirit of rivalry, would come forward to save from the ruin which such a libel would heap upon him, a gentleman whose skill and experience were of the highest order. The learned counsel then characterised

the editor of the *Lancet* to be, according to his own showing, a literary deprecator, living upon five or six thousand a year, and riding in his carriage, by means of resources which were drawn from others. Mr. Cooper, who is now thirty-four years of age, had performed many operations, and it should be remembered that his successful ones had not been reported. There was a time when the operation of lithotomy was attended with the greatest danger, but the improved modes of operation had lessened the mortality from an average of one in four to one in seven and a half. Mr. Cooper had performed the operation upon a person eighty-seven years of age with complete success. Sir James then described the operation, and said that Lambert had himself made the opening between the bladder and the rectum, as he should prove by the evidence of those medical gentlemen who had seen the parts immediately prior to Lambert's exclaiming that there was a breach in that part, and at which time there was no opening whatever. The learned counsel then read the libel, and commented upon it as he went along; and then concluded a speech which occupied more than three hours. Before entering upon the evidence, Sir James said that Clapham, who had yesterday stated in his testimony that he had not sworn that he was twenty-one years of age when he obtained his certificate, had actually so sworn, as he could prove; and Lambert, who had sworn that he did not know that Clapham was applying for his certificate, had actually signed a certificate of moral character to enable him to obtain it.

The publication of the libels was then admitted, and they were read by the officer of the Court.

THOMAS CALLAWAY examined by Mr. Pollock.—“I am Assistant Surgeon to Guy's Hospital. I have been seventeen years in the profession, and have seen nearly all the operations which have taken place in that hospital. It is usual for one of the surgeons to assist, and on the occasion of Mr. Cooper's operation I assisted. The operation lasted about fifty minutes. I could not see the first incision from the position in which I stood, but I felt Mr. Cooper cut into the grove of the staff which I had in my hand, and have therefore no doubt but that the bladder was penetrated. I was present at the *post-mortem* examination, and then found no reason to doubt that the first incision penetrated the bladder. No one can so well tell the difficulties of an operation as the operator: the assistant would not possess better means of judging than a spectator. There was a difficulty in this case, owing to the situation of the stone. Do not know that the forceps reached the bladder; but no man would be justified in introducing them, unless he was convinced that he had reached the bladder with the first incision. I have no doubt but that the forceps entered the bladder after the first incision. The situation of the stone satisfactorily accounted for the forceps not finding it. Generally the stone is to be found in the inferior part of the bladder, in the hollow of the pelvis; but here it was in the anterior part of the bladder. If the opening had been already large enough, the cutting gorget could do no injury; but if the opening was not large enough, it would make it so. In the result Mr. Cooper extracted the stone; and I think he used proper means, considering its position. No great or unnecessary violence was used, nor unnecessary instruments. I think the operation was performed with as much care as the difficulties of the case could have received. The delay was occasioned entirely by the situation of the stone, and the difficulty of detecting it. I think Mr. B. Cooper a skilful surgeon. I attended the post-mortem examination. There is a cellular substance between the rectum and the bladder, and I saw nothing which could induce me to think that the forceps had penetrated that substance. If any such injury had been done, I should have discovered it by the extravasation of blood.”

Some anatomical preparations were then brought into Court, and Mr. Wakley proceeded to cross-examine the witness upon one of them (the bladder) after it was removed from the glass for that purpose. The examination was entirely as to the anatomy of the parts, in order, if possible, to show that no difficulty ought to have existed in finding the stone.

The Witness proceeded.—“The enlargement of the opening might take ten seconds. The cutting gorget was used only once. Have threatened to expose

the corrupt system of election at the Hospital. Never said that Mr. Cooper was fitter to spend a large fortune than to be surgeon of the Hospital. Might have said, like other disappointed candidates, that I ought to have been elected. (*A laugh.*) I have seen the appearance produced in the cellular membrane by the forceps passing between the rectum and the bladder; but, in the cases in which I have witnessed these appearances they were by no means similar to the present. In the former cases there was extravasated blood; in the latter there was none, though the cellular membrane was dark coloured."

Mr. C. A. KEY deposed that he is the senior surgeon. Had seen several operations performed by Mr. B. Cooper; and that Mr. Cooper did not lose in these operations more than the average number of patients. From the description of the difficulty, as given by Mr. Calloway, witness thought he should himself have pursued the same course as that which had been adopted by Mr. Cooper. The length of time during which the operation lasted, was no criterion as to the skill of the operator. If any violence had been used, the cellular membrane would have been found lacerated, and in a state of slough, with extravasated blood. "According to my experience, it is only in a few cases that you can reach the bladder with the finger; but it is desirable to do so if possible."

JOSEPH LAUNDY deposed that he attended operations at Guy's Hospital for upwards of thirty years, and he held, on this occasion, the instruments for Mr. Cooper. Has witnessed operations in lithotomy that lasted as long. Those operations were performed by Mr. Travers, Mr. Green, and Mr. Cline, sen. One by Mr. Cline, sen. occupied one hour and forty minutes. Remembers Sir A. Cooper being once above an hour performing the operation.

Dr. HODGKIN, professor of morbid anatomy at the Hospital, deposed that he examined the parts after death, and there was no appearance of wound between the bladder and the rectum. The kidneys were mottled with a white substance, such as is frequently the case in similar diseases. When Lambert asked to see the parts he was shown them in the presence of witness. Lambert pointed out the opening between the bladder and the rectum. Witness immediately charged him with having made the opening, which he denied; but witness thinks if the opening had been there before, it could not have escaped him. The opening must have been made after death; for if before there must have been extravasated blood. He thought that Mr. Cooper was a fair surgeon and a very good anatomist.

Mr. BRODIE deposed, that he has met Mr. B. Cooper in private practice, and has conversed with him upon surgical topics; and he should think, from what he has seen of him, that he is a very intelligent surgeon; has heard Mr. Callaway's description of the manner in which the operation was performed, and thinks it was a difficult operation, and performed with skill.

Cross-examined.—Remembers the lecturers' meeting in 1825, at the Freemason's Tavern, when the lectures were first published; it being deemed a common cause, there was a proposition to pay Mr. Abernethy's expenses if he would move for an injunction against the defendant. Witness paid part of Mr. Abernethy's expenses upon his second application.

Re-examined.—"It appeared to me to be a great grievance to have the lectures published, because they were published incorrectly, and brought great discredit on those whose lectures were published."

Mr. TRAVERS.—"I have been in practice twenty years, and I have been in the profession since 1800; I have heard the evidence of Mr. Calloway as to the operation, and I have heard of no circumstance which could impeach the skill of the operator. I think the operator is the best judge as to the instrument which ought to be used. The length of time is no criterion of the skill of the operator. I am acquainted with Mr. Cooper, and think that he is an ingenious and intelligent surgeon, and fit for the situation he holds as surgeon of Guy's Hospital. There are often cases of lithotomy which for a long time baffle the skill of the best operator, and I conceive the case in question to be one of that description."

Mr. GREEN was next examined.—"I am the nephew of the late Mr. Cline, and have been for eight years surgeon to St. Thomas's Hospital. I have often

performed the operation of lithotomy, and am reputed to be very successful. I witnessed one capital operation by Mr. Bransby Cooper, which he performed admirably well. The operation was that of tying the external iliac artery, which, for skill, is somewhat like putting a ligature on the subclavian artery. From Mr. Calloway's description of the operation, I think it was skillfully conducted, and I should conceive it to have been a case of great difficulty; the length of time is of itself no criterion of the skill of the operator, the most skilful surgeon might have occupied the same time, and yet the result have been equally fatal."

Cross-examined.—"It requires great anatomical knowledge to tie the iliac artery. I was at the meeting at the Freemason's Tavern. Some lectures of mine at that time had been published. I contributed to the expenses of the injunction."

Re-examined.—"The lectures were incorrectly published, only one of them was free from misrepresentation."

Dr. BABINGTON and Dr. ROGET testified to the skill of Mr. Cooper.

Sir A. COOPER.—"I was subpoenaed by the defendant, and I heard the account given by Mr. Harrison of the education of Mr. Bransby Cooper. That account was perfectly correct. Mr. Bransby Cooper, when he first went to the Hospital, was a good anatomist and a very good surgeon, but he wanted experience in hospital practice. Still a young man must not be crushed in the outset, or the country will be deprived of perhaps first-rate abilities."

Cross-examined by Mr. Wakley.—"Sir Astley, have you never said that a good surgeon ought to be like a good general, that he should wade up to the neck in blood? Have you not said so in your lectures to your pupils?"

Sir A. COOPER.—"I don't know; I may have said so; I am sometimes fond of using strong expressions. I like, in short, to be understood. (*Great laughter.*) I think it one of the greatest evils that a man should be attacked in early life; and that he should be crushed, because he happened to have one misfortune, however capable he might be to practise in his profession. It is a power which I think the public press ought not to have." (*Laughter.*)

Mr. WAKLEY.—"Sir Astley, do you not think that the interests of the public would be best consulted by having men of experience appointed as surgeons to the hospitals, and not to appoint them for the purpose of acquiring experience?"

Sir A. ASTLEY.—"I think that every Hospital ought to have an assistant-surgeon, who would thereby be prepared for the situation which he would subsequently hold."

Mr. WAKLEY.—"Was Mr. Bransby Cooper an assistant before he became surgeon?" Sir A. COOPER.—"No, he was not; but I think it would be a good regulation to adopt in all of them."

Mr. WAKLEY.—"What was the particular difficulty in this case?" Sir A. COOPER.—"There was so little water in the bladder that this man must have made water immediately before the operation. If the bladder were full of water the stone would have been easily struck."

Mr. WAKLEY.—"What is the danger to be guarded against in the operation of lithotomy?"

Sir A. COOPER.—"The chief danger to be guarded against is violence."

Mr. WAKLEY.—"Supposing the stone to be felt, but enveloped in the folds of the bladder, would not the more prudent course be, after having vainly tried for ten minutes to extract it, to place the patient in his bed again?"

Sir A. COOPER.—"I should certainly think not, if the stone could be felt. In that case the surgeon should persevere until he got it away."

Mr. WAKLEY.—"Have you not read Celsus, Sir Astley?" (*Laughter.*)

Sir A. COOPER.—"I have dipped into Celsus, but I do not consider Celsus as a good surgical authority, although he is a classical one." (*Much laughter.*)

Mr. WAKLEY.—"Is it not the practice in Edinburgh and Paris to put the patient to bed in such cases as I have supposed?"

Sir A. ASTLEY COOPER.—"I have studied in Edinburgh, and I have witnessed operations of lithotomy in Paris, but I never saw such a practice resorted to."

Mr. WAKLEY.—"How long may the contraction of the bladder continue?"

Sir ASTLEY.—“It might last an hour.”

Mr. WAKLEY.—“What evil could result by placing the patient in bed until the contraction was over?”

Sir ASTLEY.—“Just this—What you would not like—You would have two operations instead of one to perform. (*Laughter.*) If the stone was felt, the surgeon ought to persevere.”

Mr. WAKLEY.—“Why is it more difficult to introduce the finger after death than before?”

Sir ASTLEY.—“If you had ever put your finger into the bladder of a living subject you would know the difference. By putting your finger into the bladder of the dead subject you would have known as much of the difficulty of this case as you do now of what is passing in the moon.” (*Much laughter.*)

Reexamined by Sir J. SCARLETT.—“My nephew was a surgeon in the army, and he was my demonstrator of anatomy.”

Mr. DALRYMPLE, of Norwich, deposed to Mr. Cooper's general character as a surgeon.

Mr. WATSON put in the affidavit of Clapham, one of the defendant's witnesses, by which it appeared that he had misrepresented his case.

Sir JAMES SCARLETT.—“That is my case.”

Mr. WAKLEY proceeded to reply. After referring to the origin and progress of the *Lancet*, the defendant declared that the proceedings of that day were the most peculiar that ever took place. One would have supposed, from the parade with which this case was heralded, that the report in the *Lancet* was a fabrication—that no such operation was ever performed—and that it had no foundation from beginning to end, except in the malevolent mind of the defendant. One of the witnesses for the plaintiff admitted that there were 200 spectators, and yet with all the influence of Mr. B. Cooper he was only able to produce one single spectator to rebut the charge made against him. The plaintiff sought every where but in the proper place for witnesses; he had surgeons from St. Thomas's Hospital, he had Sir Astley Cooper from Conduit-street, and it was to be wondered that the Emperor of Morocco was not also thrust into the box. With reference to the influence which Sir Astley Cooper had in the appointment of surgeons to Guy's Hospital, he put it to the jury whether Sir Astley was entitled to recommend any man to the care of patients as he had done his own nephew in this instance. This hospital belonged not to the directors, but to the poor, for whose use public funds had been granted. Mr. Callaway was elected an assistant surgeon, and Sir Astley Cooper consulting surgeon, on the same day that Mr. Bransby Cooper was appointed to the situation of surgeon. It was a saying of John Hunter, that bad surgeons made work for good ones; and that good surgeons would starve but for bad ones. Perhaps it was in reference to the operations of Mr. B. Cooper that these two supernumeraries have been appointed. Could it be pretended that Mr. Cooper was a skilful surgeon when he was unable to explain the causes of the difficulty that presented itself? Could he (Mr. Cooper) be said to have had presence of mind when, whilst he was plunging his instruments into the unfortunate patient, he openly declared that he could not find the reason for not being able to extract the stone. The poor man repeatedly called on them and implored them to loose him—he knew the torture of his cotplains! he felt the torture which he was then undergoing, still he cried to be let go.—“No,” said Mr. B. Cooper, “my reputation is concerned—I must take out the stone, even though you should die.” He did die. The defendant most solemnly protested to God that he had no ill will towards Mr. Cooper, he believed him to be a most amiable private character; but as a surgeon—as a surgeon of a public hospital—as a public functionary, he denounced him to be ignorant and incompetent. Let the jury weigh well the evidence, and if they felt that they, if afflicted in a similar way, would not suffer Mr. Bransby Cooper to operate on them, then they must find their verdict for the defendant.

His lordship then proceeded to sum up the evidence.

After an absence of two hours, the jury returned a verdict for the plaintiff, damages 100*l.*

MONTHLY LIST OF MEDICAL BOOKS.

[Medical Works cannot be entered on this List except a copy be sent for the purpose; the titles of Books having frequently been transmitted to us, as published, which have not appeared for weeks, or even months, after.]

A Manual on Midwifery; or, a Summary of the Science and Art of Obstetric Medicine; including the Anatomy, Physiology, Pathology, and Therapeutics, peculiar to Females; Treatment of Parturition, Puerperal and Infantile Diseases; and an Exposition of Obstetrico-legal Medicine. By MICHAEL RYAN, M.D. &c.—8vo. London, 1828.

A Practical Treatise on Parturition, comprising the attendant Circumstances and Diseases of the Pregnant and Puerperal States. By SAMUEL ASHWELL, Member of the Royal College of Surgeons, and of the Medico-Chirurgical Society of London. To which are appended two Papers, the one containing some Remarks on Abdominal Surgery, the other on Transfusion; presented by Dr. BLUNDELL, of Guy's Hospital.—8vo. London, 1828.

METEOROLOGICAL JOURNAL,

From November 20th, to December 20th, 1828.

By Messrs. HARRIS and Co. Mathematical Instrument Makers, 50, High Holborn.

November	Rain gauge.	Moon.	Thermom.			Barometer.		De Luc's Hygrom.		Winds.		Atmospheric Variations.		
			9 a.m.	10 a.m.	11 a.m.	9 a.m.	10 a.m.	9 a.m.	10 a.m.	9 a.m.	10 a.m.	9 a.m.	2 p.m.	10 p.m.
			9 a.m.	10 a.m.	11 a.m.	9 a.m.	10 a.m.	9 a.m.	10 a.m.	9 a.m.	10 a.m.	9 a.m.	2 p.m.	10 p.m.
20		○	44	54	44	30.01	29.94	65	62	WNW	W	Fine	Fine	Cloudy
21		○	49	57	50	29.94	29.80	63	63	W	W	Fine	—	Fine
22		○	52	56	41	.72	.81	68	69	WSW	WNW	Fine	Cloudy	Show'ry
23		○	45	56	43	.90	.87	66	67	SW	SW	—	—	Fine
24		○	46	52	45	.61	.66	67	70	SW	SW	—	Fine	Fine
25		○	50	55	49	.80	.88	69	70	SW	SW	Foggy	Fine	Fine
26		○	54	59	48	.76	.73	71	70	WSW	W	Fine	Cloudy	Show'ry
27		○	50	58	46	.88	30.00	68	67	WNW	WNW	Fine	Fine	Show'ry
28		○	50	59	45	.96	..	68	67	W	WNW	Cloudy	Fine	Cloudy
29		○	49	59	50	30.00	..	66	66	W	WNW	Fine	Fine	Fine
30		○	54	56	49	..	29.90	66	68	WNW	NW	Cloudy	—	Cloudy
Dec.		○												
1		○	51	51	38	29.87	30.06	62	56	NNW	ENE	Fine	Fine	Fine
2		○	36	60	36	30.31	.22	54	57	SE	S	—	—	—
3		○	40	51	41	.05	.02	56	63	W	W	—	—	Cloudy
4		○	50	53	45	.10	.11	67	67	WNW	WNW	—	—	Cloudy
5		○	52	53	48	.06	29.94	67	64	W	SSW	Foggy	Cloudy	Cloudy
6		○	45	52	45	29.80	.56	65	67	SSW	SW	Fine	Fine	Rain
7		○	50	53	44	.45	.40	65	63	W	SW	—	—	—
8		○	46	48	39	.28	.14	63	66	W	WNW	Foggy	Rain	—
9		○	40	48	38	.45	.80	65	64	W	WNW	Foggy	Fine	Fine
10		○	39	54	44	30.02	30.00	64	66	W	W	St. Fog	Fine	Cloudy
11		○	54	56	48	29.79	.17	67	64	W	WNW	Rain	Fine	Fine
12		○	46	53	42	30.24	.24	65	70	W	W	Fine	Fine	Cloudy
13		○	48	54	46	.21	.26	68	66	W	W	Cloudy	Cloudy	—
14		○	49	50	40	.30	.11	67	65	W	SW	Fine	Fine	—
15		○	41	50	40	.15	.08	64	66	S	S	Foggy	Fine	Fine
16		○	49	51	46	.09	29.87	68	67	WSW	WSW	Fine	—	—
17		○	49	58	55	29.71	.73	71	74	W	W	Rain	Fine	Rain
18		○	58	56	48	.53	.40	72	78	W	WNW	Show'ry	Show'ry	Rain
19		○	46	52	46	.61	.58	66	64	WNW	NW	Fine	Fine	Fine

The quantity of Rain fallen in the month of November, was 1 inch and 2.100ths.

For the Bookman's Library

THE LONDON Medical and Physical Journal.

NO. 360, VOL. LXI.] FEBRUARY, 1829. [NO. 32, *New Series*.

For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work, to which the Faculty, in Europe and America, were under deeper obligations than to the *Medical and Physical Journal of London*, now forming a long, but an invaluable series.—RUSKIN.

ORIGINAL PAPERS AND CASES, OBTAINED FROM PUBLIC INSTITUTIONS AND OTHER AUTHENTIC SOURCES.

DISEASES OF THE NAILS.

Remarks on certain Diseases of the Nails and the surrounding soft Parts. By G. T. BURNETT, Esq.

THERE are certain diseases of the nails, which, from the little notice they have excited, would seem to be rare, and yet which, from the cases I have already met with, I can scarcely believe to be uncommon. It is true that they do not in general endanger life: still they are oftentimes the cause of great and continued suffering. Can it be that professional pride hath led to their proscription, as too trifling to be worthy the surgeon's notice; and, by excluding them from regular, hath consigned them to empirical practice? or can it be that the unsettled treatment and unsatisfactory results of such cases, have been the cause of this apparently contemptuous silence! so that they have scarcely, if at all, a place or name in any of our systems of nosology.

Should the following observations on one of these trifles seem worthy a page in your forthcoming Number, the influence of the London Medical and Physical Journal, which has done much for our very important, though at present imperfect, science, may probably induce some of its readers, as opportunity occurs, to turn their attention to an apparently trifling, yet exceedingly troublesome, form of *onychia* [[?]] which, I believe, is seldom, if ever, mentioned. Indeed, I scarcely know if I am justified in thus designating the cases

to which I refer, as they decidedly possess not either the history or characters of the true or common whitlow. Megonychia, or Onychia ulcerata, might be less exceptionable terms; and, as Paronychia is not only the most familiar, but also the best, name for true whitlow, Onychia, often used as a synonym therewith, might not improperly include the two.

The letter of your Paris correspondent, published in the Number for December last, well describes the severe and painful operations resorted to for the cure of onychia maligna; and some of the cases thus called I cannot but think are cases of onychia ulcerata, such as I am going to describe, rather than of the onychia maligna of Mr. Wardrop. If so, the treatment I would recommend is certainly much more mild and simple, though, as far as my limited experience goes, not less efficacious.

The nails, like all other parts of the body, are subject to occasional variations in their form and mode of development, giving rise to preternatural and morbid growths: when these variations are slight, they pass unnoticed; even when greater, if they produce not much inconvenience, they are regarded as harmless monstrosities, rather than disease: when, however, the ordinary duties of organs are disturbed, and especially when pain ensues, the interference of the surgeon is demanded.

The morbid development to which the present observations more particularly refer, is that in which the nail is not only broader than natural, but the sides curve preternaturally downwards, at first compressing, and subsequently entering, the nail bed; causing, in the early stages, pain and inflammation, and afterwards ulcerations, even of a malignant kind. Sometimes the morbid development is of the nail alone, sometimes chiefly of the onythalamus, but most frequently of both: i. e. not only does the nail morbidly incurvate, but the nail bed also is preternaturally enlarged. This disease most commonly affects the feet, especially the great toes: the hands, however, are not exempt, the thumbs occasionally being thus diseased. The detail of a case, however, perhaps may prove the best description.

— Saunders, a healthy young man, aged twenty, consulted me on account of lameness, occasioned by pain and swelling of the left foot, especially of the great toe. On examination, the toe was found inflamed, being very red, hot, tumid, and painful; the inflammation extended also towards the inner ankle, and laterally over the metatarsus: on any attempt to walk, the placing the foot

on the ground produced great uneasiness, and if persevered in, "torture." The right side of the toe was chiefly affected, and from the sulcus between the nail and fillet which bounds the onychial space there was a semi-purulent discharge; unhealthy granulations had sprung up in the ulcerated cleft; and these, with the ichorous discharge, &c. gave the disease, at first sight, the aspect of onychia maligna.

The previous history was obscure, for it had progressed much; the nail having curved considerably downwards, and the nail bed enlarged, before it produced so great inconvenience as to excite attention. He endured this state of things for some time, suffering more or less, before he sought relief; and then pursued the plan (which I remember being ordered for a similar case, when I was dresser at the hospital,) of introducing pledgets of lint into the cleft between the nail and flesh, thus endeavouring to raise the curvature of the nail, and cause it to overlap the soft parts, instead of the soft parts pressing against its edge. This plan, however, (as I remember also was the case when I dressed the patient before referred to,) caused much uneasiness, without affording any adequate relief: it was, therefore, after a time neglected, and shortly the edges of the nail excoriated the soft parts, and an ulcer was produced; and now the pain on attempting to walk was much increased. The side of the nail was then pared away, which gave some ease; and he had been in the habit, before I saw him, of cutting away the side of the nail with his penknife as far as he could reach; but, as the nail grew, its sharp edge advancing into the tender and enlarged fleshy side of the nail bed, increased the disease, the ulcerated surface became more irritable, and the ichorous discharge before mentioned was the result.

At the first glance, as before stated, this did not look unlike a case of onychia maligna; the sulcus between the nail and soft parts being ulcerated, the ulceration chiefly towards the root of the nail, unhealthy granulations sprouting up at this point, a scanty semipurulent discharge being present, and the surrounding parts in a very irritable state. But the history was totally different; for here the ulceration was the consequence, and not the cause, of the affection of the nail. The other side of the toe gave me a good opportunity, by showing a disposition to the same disease, of watching its progress, and verifying the previous details.

After reducing the inflammation by ordinary means, the ulcerated side was dressed with caustic, &c., and the nail allowed to grow its full width; after which, the attempt was again made to reduce the incurvature of the nail, by placing pledgets of lint between and under its edge and the soft parts; and this was also done from the beginning with the other side. Finding the inconvenience of this plan to be great, and, after a perseverance of several weeks, the benefit, if any, to be very little, some other treatment was to be thought of. Two plans would appear nearly equally feasible: either, 1st, to remove the nail, or at least the

incurvating sides, with the corresponding portions of the matrix; or, 2d, to remove the soft parts into which the nail pierced. Had the nail been removed by avulsion, or destroyed by cautery, or dissected out with its matrix, as recommended in onychia maligna, (the operation in this case must have been performed on both sides of the toe, if any part of the nail was to be preserved; and,) to say the least, it would have seemed severe and painful treatment in so apparently trivial a disease. I therefore preferred the latter practice, viz. the removal of the sides of the onythalamus; and, placing the point of a catlin in the cleft, removed at once the side of the nail bed into which the nail entered. The sore soon healed, no cause of irritation being left; and the like operation was subsequently performed on the other side of the toe, with the like result.

I fear I have trespassed as far as the subject will warrant on your valuable pages, and will therefore only add that, when the toe of the other foot of the same person became similarly affected, no time was wasted in palliative treatment, but, by removing the exuberant sides of the onythalamus before ulceration took place, I avoided by anticipation much pain and inconvenience.

Lest, however, I should be misunderstood, let me, in conclusion, state that I am far from thinking this treatment could be beneficial in cases of true onychia maligna, in which (at least as far as I have been able to perceive,) the abscess and ulceration are at and under the root of the nail, the burrowing of which produces the necessity of removing the present nail, but which, the ulceration being cured, would not be injured by the growth of a future one; and, therefore, when I hear of the necessity of dissecting out the matrix, as well as removing the nail, I cannot but think that some cases have been considered as onychia maligna, which in truth were rather onychia ulcerata; as in the former the future growth of the nail would not, and in the latter it would, if the soft parts remained, reproduce the disease.

In a case of onychia maligna, which occurred in a young lady aged twelve, the nail was obliged to be removed, but the matrix was left untouched; the ulcerations were healed, and the nail grew again, but there was no return of the disease, at least not in that finger. This had been a very severe case, and the matrix was so much disturbed that the nail, when reproduced, grew in longitudinal plicæ, or undulations, which, having an unsightly appearance, have since produced much chagrin.

Neither could the removal of the sides of the onythalamus be useful in all cases even of megonychia; for I re-

member an instance in which the morbid growth and incurvation took place lengthwise, the nail being much thickened as well as curved, assuming an appearance something between an horn and a claw. This monstrosity, which had for years gradually increased, and had twice been cut off, at length was allowed to grow into the flesh half-way down the first phalanx of the thumb; and, when I was consulted, the parts were in such a state of disease that amputation (which accordingly was performed) promised the only chance of relief.

These cases may seem trifling, and scarce worthy of being placed on record; but, shall splendid volumes be published on the great operations of surgery, which can only by few and on few persons be performed, and shall a transitory notice be denied to lesser ills, which, by the frequency of their occurrence, make up the great sum of human misery?

January 12th, 1829.

COLICA PICTONUM.

On the Treatment of Colica Pictonum by Alum, under the direction of M. KAPLER, Physician in chief of l'Hôpital Saint Antoine. By M. D. MONTANCEIX.

FOR the last thirteen years, M. Kapeler has treated colica pictonum with alum, with a very favorable result. From fifteen to twenty persons affected with this disease are annually received into the hospital. The practice adopted at La Charité, which consists of drastic purgatives, sudorifics, and narcotics combined, is that which is usually had recourse to in France. As a proof of the efficacy of M. K.'s treatment, the following interesting cases are related.

CASE I.—L. Bouigny, of a good constitution, aged nineteen years, a house painter by trade, was admitted on the 20th of February. The symptoms were as follow: For the last eight days he had been obstinately constipated, notwithstanding several clysters had been given. Great pain in the abdomen, which was rather relieved by pressure. Gnawing sensation of the stomach. Tongue dry and white; mouth bitter; urine scanty. Pulse forty in a minute; no headache. He has had no sleep for the last four days.

On the day of his admission, he took a mucilaginous mixture, with a drachm of the sulphate of alum, a tablespoonful each hour. An emollient clyster was administered. Barley and linseed water for common drink; spare diet.

21st.—Pulse quicker; tongue not so dry; less bitterness of the mouth; pains diminished; two hours' sleep. He has had two motions in the night, and has made water three times.

The same remedies continued.

In the evening, all the abdominal symptoms had ceased, and the pulse was nearly natural.

22d.—Continues better.

To take half a drachm of the sulphate of alum in the mixture as before. Broth diet.

25th.—Perfectly free from all symptoms of the disease.

26th.—Complains of pain in the head, with symptoms of general excitement. He was bled, and a blister was applied to the neck; and soon after he left the hospital.

CASE II.—C. Baudin, an earthenware potter, of a weak constitution and lymphatic temperament, aged thirty-one years, was attacked, on the 26th February, with very acute pains in the belly, which obliged him to roll upon the ground. He uttered the most piercing cries, and was thrown into various positions. His suffering was somewhat relieved by applying a tight bandage round the belly. He was sleepless, complained of headach, and had been constipated for two days. He had a creeping sensation over all his limbs.

27th.—He was admitted in the following state: Extreme depression, trembling, and convulsive movements of the upper limbs; cramps in the lower limbs. The eyes were particularly brilliant. Acute pains in the abdomen, which were relieved by pressure, although the patient was averse to it. Retraction of the belly. Tongue dry, and of a blackish colour. Urine of a small quantity, and red; bowels constipated. Pulse small, and thirty-five in a minute. He was delirious two hours after his admission, and the strait-waistcoat was required.

Ordered to have barley and linseed water for common drink. Mucilaginous mixture, with a drachm of the sulphate of alum. An emollient clyster was given. Strict diet.

28th.—In the same state. Delirium has been very violent during the night.

Sulphate of alum two drachms. An oily clyster every half hour.

In the afternoon, the patient had recovered his senses, and complained only of a slight pain in the epigastric region and in the head. His bowels had been freely open, and he had made a large quantity of water.

Sulphate of alum one drachm. Same diet.

He now became convalescent, and in eighteen days was discharged well.

CASE III.—J. Maiseau, of a strong constitution and bilious temperament, forty years old, a cooper by trade, was admitted on the 27th February, in a state resembling intoxication. He was violently delirious; his look was wild, and he was apprehensive that some injury would be inflicted upon him. He was furious when his belly was pressed, but still the pain which he complained of appeared to be relieved. Pulse very slow.

The case was at first doubtful, but it was soon ascertained that

he had several times been attacked with metallic colic, and had once been in La Charité for three months with this disease. He was ordered a drachm of the sulphate of alum and a purgative clyster. In three hours he was much calmer, and he had a tranquil night. No evacuation from the bowels.

28th.—Patient calmer, but still he had not regained his mental faculties. Pulse very slow; abdomen painful; continual shaking of the head; tongue dry and rough.

To take two drachms of the sulphate of alum.* Purgative clyster every hour. Linseed tea for drink.

In the evening, the patient had recovered his senses, but had no recollection of what had passed. Still pains in the belly. He is now amaurotic, and has entirely lost his sight. Trembling in all the limbs. Bowels have not been opened.

Sulphate of alum two drachms. Two purgative enemas.

29th.—Pain has ceased; no trembling; return of appetite. Continues amaurotic. Has had four motions in the night.

Repeat the same remedies.

March 1st.—No alteration.

2d.—Begins to distinguish objects.

Medicines continued. Allowed soup.

15th.—Sight entirely recovered.

From the 3d to the 12th, he has taken each day a drachm of the sulphate of alum. Several boils have appeared in various parts. He was discharged cured, after having been fifty-three days in the hospital.

CASE IV.—J. Legrand, of an ordinary constitution and bilious temperament, forty-two years old, a lapidary by trade, has been treated fourteen times in the space of twenty years for colica pictonum. The first attack occurred when he was about twenty-one, six months after he commenced his business. He had always been admitted into La Charité. When he was first seen, on the 29th February, he said that, eleven days before, he was suddenly seized with general uneasiness and headach, which lasted four days. On the 25th, he had cramps in the lower extremities, and pains in the belly, which were at intervals very severe. He does not complain on pressure. Loss of appetite: nausea, vomiting. Convulsive movements of the arms. Tongue white and moist; bitter taste in the mouth; severe pain in the belly. Has been constipated for three days. Pulse forty.

Ordered, linseed and barley water for common drink. Mixture with gum and a drachm of the sulphate of alum. Purgative clyster. Strict diet.

In the evening, symptoms increased. Movements of the arms

* The precise mode in which this medicine was taken is not mentioned. We presume it was given in a mixture in divided doses, as is prescribed in the first case.—EDITORS.

frequent; powerful cramps in the legs; excruciating pain in the belly; bowels continue constipated; tenesmus.

To take sulphate of alum two drachms; two purgative clysters. Six drops of croton oil to be rubbed around the navel.

March 1st.—In the same state. Bowels not open.

Sulphate of alum two drachms. Two oily injections.

In the evening, still the same.

To take two drachms more of the alum.

2d.—No alteration. M. Kapeler, still confiding in the medicine, which had never disappointed him, prescribed again two drachms of the sulphate of alum, and three oily clysters.

3d.—Much relieved. Has had four motions in the night, and made water freely. Pulse nearly natural; he says he is well.

Ordered one drachm of the sulphate of alum, and broth.

5th.—Free from complaint.

CASE V.—L. Felix, of a bilious temperament and weak constitution, aged eighteen, a house painter by trade, was admitted the 19th April. He had been attacked with colica pictonum five days ago. The disease was well defined: acute pains in the abdomen, which were neither increased nor diminished on pressure; bowels constipated; tenesmus; retraction and hardness of the belly; nausea and vomiting of greenish and filmy matter; tightness in the præcordia; features of the face altered; tongue dry and foul; pulse slow; headache; paroxysms of dyspnoea. All these symptoms yielded to a drachm of the sulphate of alum, and to a purgative enema, as to a charm. He had eight stools in the night.

The same treatment was continued for three days, and he was discharged perfectly cured.

CASE VI.—P. Racine, of a strong constitution, and of a bilious and sanguineous temperament, aged forty-five, a house painter, had suffered from the disease seven times.

Symptoms: May 1st.—Slight pains in the hypogastrium; loss of appetite; tongue dry and white; breath fetid; headach; numbness of the arms, principally the right; loss of recollection of nouns and numbers; pulse slow; constipated bowels; urine acrid, and in small quantity. These symptoms had existed for six days.

Ordered one drachm of the sulphate of alum in a mucilaginous mixture, and a purgative enema. Linseed tea for beverage.

June 1st.—Has had five or six motions during the night, and declares that he is cured. The pains, numbness, and headach are removed. He cannot count up to five.

Continue medicines. Broth diet.

2d.—Continues better.

3d.—Memory perfect. Discharged cured on the 7th.

CASE VII.—P. Mahille, of a weak constitution and bilious temperament, twenty-three years of age, a house painter, had been

twice attacked with colica pictonum. He had now been discharged one fortnight from La Charité, with every appearance of being permanently cured. He had avoided, since, the exciting causes of the disease; and still, eight days afterwards, it returned with more severity than ever. He was admitted into the Hôpital St. Antoine, July 5th.

Symptoms: Extreme depression of mind and body; dilated pupils; abdomen retracted, and *very painful* on pressure; continual and violent colic; no stool for two days; frequent nausea, no vomiting; wandering pains and creeping sensation in the arms; spasms of the lower extremities; headach; tongue dry, and rather black; bitter taste in the mouth; pulse thirty-two; skin cold and moist.

Ordered a mixture with gum, one drachm of the sulphate of alum. Purgative enema.

6th.—No motion. Pulse thirty; vomiting of greenish matter. To take two drachms of the sulphate of alum; two oily clysters.

7th.—No alteration. No motion.

To take three drachms of the sulphate of alum, and to have an oily injection every half hour.

8th.—Colic diminished; pulse thirty-five. Still no evacuation from the bowels.

Medicines continued. Three drachms of alum repeated in the evening.

9th.—Had a copious motion in the night, and was immediately relieved. Pulse forty; tongue moist and white.

Remedies as before.

10th.—Has had two motions this morning.

Continued to take three drachms of the sulphate of alum till the 13th. On the 16th, discharged well.

CASE VIII.—J. Roblin, of a strong constitution and nervous temperament, forty-six years of age, by trade a brazier, was attacked, the 20th July, with violent colic, which obliged him to roll upon the ground. The belly was surrounded by a towel, very tightly bound. He had drank milk freely, and used several clysters, to no purpose. The disease increased in severity, and on the 23d the following symptoms were present: Face pale and stupid; headach; loss of appetite; tongue white and moist; bitter taste in the mouth; dragging sensation in the stomach; pain around the navel, relieved by pressure; retraction of the belly; spasms of the arms; urine scanty, bowels constipated; pulse thirty-nine; skin cold and dry.

Ordered barley water for common drink; mixture with gum; sulphate of alum one drachm; purgative enema.

24th.—Better. Has had three motions in the night; urine copious in quantity. Pulse forty-six; belly still painful; numbness in the legs; spasms of the arms have ceased.

Remedies continued.

25th.—No pain in the belly; numbness of legs diminished; pulse fifty-five. Two motions.—To continue medicines.

26th.—Convalescent. Discharged July 2d, cured.

CASE IX.—N. Dureux, of ordinary constitution and bilious temperament, fifty-one years old, a brass founder, felt, on the 18th July, slight colic, and an itching and creeping in the limbs; in the evening, trembling of the arms. He continued to work till the 24th; but, as the disease now became more severe, he was admitted into the hospital.

Symptoms: Face pale and anxious; tongue covered with a yellow mucus; bitter taste in the mouth; no appetite; excessive pain in the belly, particularly in the hypochondria; no increase of pain on pressure; heartburn, nausea, and vomiting of a greenish matter; urine scanty, bowels constipated; great debility; spasms of the limbs. Has passed a sleepless night. Pulse very slow.

Ordered, linseed tea and barley water for drink. Mixture with gum; one drachm of sulphate of alum. Purgative clyster.

27th.—Greatly improved. Pulse nearly natural; all the symptoms diminished in severity. Has had three motions, and an abundant discharge of urine. He afterwards slept very comfortably.

28th.—No complaint. Appetite good.

To take half a drachm of alum.

Discharged, the tenth day, well.

CASE X.—P. Fournier, forty-five years of age, house painter, of a strong constitution and sanguine temperament, has suffered eight attacks of metallic colic. He has always been treated at La Charité, and has generally left that hospital with paralysis of the left wrist. For the last attack, he was six weeks in the Hôtel Dieu, after having been two months in La Charité. Since the first occurrence of the disease, he has almost always felt slight colicky pains; his bowels have been alternately constipated and relaxed; in short, his health has never been completely established.

September 22d.—Fifteen days ago, after his work, he was attacked with rather violent colic and purging; weakness in the limbs; loss of appetite, nausea, no vomiting, has continued, with varying symptoms, until the present time. The symptoms that now exist are obstinate constipation, tenesmus, and weight at the fundament; giddiness; scanty urine, of a red colour, and with very copious sediment; violent colic, which is neither increased nor relieved by pressure; extreme weakness; ardent thirst; tongue white and moist, mouth foul. Has had no sleep for five nights. Cramps and spasms in the limbs, principally on the left side. The left forearm was yesterday so senseless that, when it was placed near a powerful fire, he did not feel it. Pulse thirty; skin cold and dry.

Ordered, linseed tea for drink. Mixture with gum; one drachm of sulphate of alum. An emollient clyster.

23d.—Much better. Pulse 120; all the symptoms milder; has had some sleep. Bowels opened eight times one hour after the medicine; copious discharge of urine.

To continue the remedies.

24th.—Complains only of slight weakness in the left side, which was yesterday quite benumbed. Appetite good. Has had no sleep in the night; bowels been open twice; frequent inclination to make water.

Medicines to be repeated. Broth diet.

25th.—Improved in every respect. He has walked in the ward, and amused himself with reading. Still complains of want of sleep.

To take half a drachm of alum. Broth diet, and a little soup.

26th.—Free from pain. Cramp of the left arm, which is no longer benumbed. He cannot walk up stairs. Has had one motion; no sleep.

Remedies as before. A mild anodyne pill. A little meat allowed.

27th.—Better in every respect. Still want of sleep.

28th.—Well. Has slept all night. Has regained his strength.

After a detail of these cases, it is presumed, by M. Montanceix, that the efficacy of the practice of the Hôpital St. Antoine must be established. Thirteen years' experience have proved the value of the proposed remedy, which is both innocent and effectual.

It is to be observed, that the subject of the third case had only left La Charité seventeen days, when the disease returned with the most alarming symptoms, which were quickly removed by a few drachms of the sulphate of alum. In the seventh case also a relapse occurred, without fresh exposure to the original cause of the malady, after the patient had been discharged eight days from La Charité. Case the tenth requires but little comment: it clearly proves the efficacy of the treatment proposed.

Neither inflammation of the stomach or bowels has ever occurred. In most cases, three or four drachms of the alum were sufficient to render the patient convalescent, and in no one instance has a relapse happened. M. Montanceix has seen the patients frequently after their discharge, and is therefore able to speak confidently upon this point.

It will be perceived that the requisite dose of the remedy is not always in proportion to the severity of the disease. Cases, which commenced with very alarming symptoms, yielded to two or three drachms; others, which appeared mild in their character, resisted even eight or ten drachms. The physician must therefore act according to circumstances, but the first dose should not be more than one drachm.

The sulphate of alum is asserted to be the best remedy we possess against the metallic colic. We think, observes M. Montanceix, that it will entirely supersede every other medicine, if its effects are impartially compared with other modes of cure.

Alum has been before much extolled as a remedy in colica pictonum, although it has been of late but seldom used in this country. If it should be found, as is stated in the above interesting paper, that a relapse never occurs after its employment, it should certainly not be neglected. Dr. GRASHUYS considered alum as a specific in this disease.* Dr. PERCIVAL gave it in doses of fifteen grains every four or six hours, and he declares with unvarying advantage.† The same plan of treatment has also been highly recommended by the German physicians.—EDITORS.

DISEASES IN HINDOSTAN.

A Memoir on those Diseases which proved so fatal to our Troops during the Burman War; with a comparative Sketch of their analogous Cases in Hindostan, during a Service of some years.
By JAMES WALSH, Assistant Surgeon 89th Regiment.

(Continued from p. 35.)

IN my own case, which was a secondary intermittent, of that extremely irregular description alluded to, I felt compelled, although still labouring under considerable cerebral and hepatic disturbance, to have recourse to large opiates: otherwise, such was the overpowering depression and indescribable alarm rapidly setting in, that, if not immediately relieved, it must have terminated in death, or worse than death, mental alienation. However, the opiate soon produced a pleasant change of feeling, speedily ending in a sound sleep, with a profuse perspiration, and a consequent solution of the paroxysm. Up to this period, I had always entertained a strong objection to opium, wherever topical affection, even on a small scale, might exist; and in my own person I entered upon it rather against my will, from an early idiosyncrasy, wherein I always found it stimulant and exciting, as well as invariably preventing sleep.

In the course of some years' Indian practice, I yielded rather too much, perhaps, to this prejudice, and may have, one time or other, withheld from my patient no small alleviation of his sufferings, and from myself the satisfaction of

* Tentam. de Colica Pictonum, et App.

† Obs. and Exp. on the Poison of Lead. 1767.

witnessing it. However, from the decided benefit following its administration in those intermittents, and other anomalous cases, it is obvious the prejudices against it must have arisen from unfounded theory and causeless apprehension, instead of attentive observation and practical deduction.

Cinchona, next in the scale of exhibition, encountered with me as strong objections as opium ever did, the one for its narcotic properties, and the other for its general inertness. To this conclusion I had long come, from observing its almost total inefficacy in the intermittents of Belgium and North America, where I had seen it rather extensively tried. Whether it might have arisen from a superiority in the quality of the bark used in Pegu, I cannot say, but its beneficial effects were most marked and decisive. I entered upon its prescription for others rather in compliance with general custom or professional routine, than with the hope of advantage: for myself I commenced it merely in obedience to the injunction of a medical friend; but, in a little time, and in a variety of unpromising cases, I found myself agreeably undeceived at every step. These intermittents were not merely obstinate and unmanageable, but extremely apt to return, even after a long interval of freedom: and the relapses not only much more frequent than from similar affections in other countries, but their irregularity and severity were often increased. I have observed the recurrence of ague from a short exposure to a current of cold air after a sudden momentary exertion, or even from a large draught of cold water, when advanced convalescence and returning strength had given hopes of progressive and certain recovery.

Arsenic, I believe, was not often used, nor can I now recollect its exhibition, or even that it was furnished at this period in the list of hospital medicines; but I have elsewhere seen abundant proofs of its general efficacy.

It might be supposed that opportunities of anatomical investigation, so prodigally furnished, ought to have been proportionally attended to; but when it is considered that the hospital was invariably crowded to overflowing, with half, and more frequently three-fourths, of the regiment, all requiring the most minute and repeated attention, it must be admitted that little satisfactory in morbid research could often be obtained.

When we also take into account the officers labouring, at least in equal proportion, as well as under equal or greater violence of disease, with the soldier, and calling as

strongly for his share of sympathy and attention, very little time was necessarily left to the surgeon or assistant for his personal wants or attention to his own health, often most seriously impaired. If to this may be added the severe illness of one medical officer, (too often the case,) and the absence of another with a detachment on duty or stockade attack, once or twice a week, and now and then for three or more days successively, it will be considered, perhaps, rather a matter of wonder that an effort at morbid investigation could be made at all. Yet enough was done to satisfy comparative inquiry with their corresponding cases in India, as well as those occurring at subsequent periods, when the force was advancing towards the Burman capital.

The remittent of Pegu was attended with morbid appearances very closely analogous to those of the Indian delta. The effects of cranial determination were sometimes most markedly evident in the increased vascularity and highly turgid state of the vessels, with occasional deposition of lymph or pus on some part of the membranes, and these exhibiting a more or less thickened and altered state. Serous effusion in the ventricles and about the base of the brain has been also observed to a considerable extent. The liver was often found much altered in colour, and so much distended and gorged with blood as scarcely to bear handling or pressure. The gall-bladder now and then nearly empty, or containing a small quantity of thin, light-coloured bile: in other cases it was much enlarged, and, when cut into, discharged a viscid, thick, and dark substance, not unlike tar in consistence or colour. The other organs or viscera evinced little or no trace of diseased action.

This more frequent disorganization of the liver in alluvion remittents, Indian or Burman, affords a contrast to what I have seen in jungle or hill affections, similar in violence or progressive development. The fevers of the pestilential jungle of Wynaad have at times evinced deleterious miasmatic influence to as concentrated an extent as the endemic of the west; yet the abdominal viscus most frequently bearing the onus of disease was the spleen, whilst the liver remained uninjured. In the majority of these (Wynaad) cases, the spleen was considerably enlarged, often to twice or three times its ordinary size, and in structure so soft and pulpy as readily to give way on the slightest pressure. It appeared so broken down internally, and so gorged with blood, as to resemble a mass of broken-down coagulum, rather than an organized viscus.

On the other hand, a few of the worst Wynaad cases which I have seen were marked by a singular deviation from the usual morbid results. This description of fever was attended with a highly yellow state of the skin, a like suffusion of the eyes, and generally with excessive gastric irritability and vomiting of matter more or less dark ; and, although terminating fatally in four or five days, the traces of local injury or disorganization were so trifling as to excite the highest astonishment at their rapidly destructive results, and that death could have occurred so early without affording any grounds for a just pathological conclusion as to the cause.

The vigorous treatment so imperiously called for to obviate rapid disorganization, must unfortunately, and but too naturally, even when successful, have left the patient in a state of great debility, as well as more susceptible of morbid action than before. Hence, those escaping from the immediate fatality of violent fever were, in general, observed to sink sooner or later under the attack of cholera or dysentery.

Of rheumatism, it was remarked before as being often attended with a vast deal of trouble, but no danger: its treatment, therefore, could have given rise to little embarrassment or anxiety ; but in cholera or dysentery there was a miserable reverse, almost every case of the one being carried off with frightful rapidity, whilst those of the latter, although more protracted, were equally fatal in their results.

It is not in the power of language to depict, or scarcely even in a strong imagination to conceive, the state of a large hospital thus circumstanced, crowded to excess with the dead, the dying, and those screaming out, with piercing agony, for relief or dissolution. That medical man must have been made of stern stuff indeed, to be able to look round unmoved upon such a scene as this. Medicine often given up as wholly useless, nearly without assistance or servants, and perhaps also in a state of total want, or at least scanty supply, of cordials, restoratives, or other comforts.

The few who escaped, or evinced any degree of convalescence, were sent to their barracks, as well for change of air and the company and assistance of their comrades, as to afford better accommodation to those remaining in hospital; but the convalescent had soon to be readmitted, sinking under cholera or attacked with dysentery ; and it may with truth be affirmed, that almost every man attacked with one

or the other, or both, (for they were often combined,) gave himself up for lost, and the prediction was in general too fully verified.

Medicine he ceased to have any faith in, and the medical officer, at times, instead of attending to its exhibition, which the patient despairingly refused, would endeavour to hold out the benefit of resignation and hope, but to very little purpose. The unfortunate soldier would make his will, as he called it, and then lay himself down, sometimes with an appearance of resignation, indeed, but without a ray of hope; at other times with the fixed eye and convulsive shudder of despair.

Of cholera, as it appeared in Burmah, little else might be said beyond the sad record of its attack and fatal result, if the symptoms of this period did not offer a powerful contrast to those occurring when the regiment lay at Madras for ten or twelve days, previous to its embarkation for Rangoon. In those days of health and plethoric fulness, cholera pervaded the corps with epidemic violence and great mortality. The man in his barrack room was as often seized with cholera as his comrade exposed to fatigue and insolation. In the latter case, indeed, the complaint could not early admit of being distinguished, having so mixed a character of high cerebral disturbance and febrile excitement before the more marked spasm of cholera set in. But this made, in the first instance, no difference in the mode of treatment, as the cholera, single and uncombined, of this period (May 1824,) would evince, with the abdominal and spasmodic uneasiness, much vascular and sensorial excitement, calling for bleeding to as great an extent, perhaps, as the synocha itself might require. The other symptoms of spasmodic disease soon appearing, left no room for doubt or much time for remedial effort.

Headache, quick (and in the beginning a strong) pulse, although shortly sinking into collapse, violent spasm more or less diffused, accompanied with incessant gastric and alvine evacuations of a thin watery fluid, suddenly ejected, and often in larger quantity than the fluid administered, would in many cases carry off the patient in a few hours.

The inflammatory action in cholera, although at this time so marked and conspicuous, was not attended with that state of the circulating fluid which takes place in other inflammations. I have bled largely in every case when called on early, and never observed the blood with a buffy surface.

During or soon after the free abstraction of blood, some

relief or suspension from gastric irritability would now and then take place, so as to allow the retention of calomel and opium. Time was also afforded for warm baths, with warm spirituous fomentations to the scrobiculus, generally the seat of permanent and intense uneasiness. Constant and unremitting friction with the hand, flannel, hot sand bags, &c. over a great portion of the body, particularly the abdomen, extremities, and other spasmed parts, was often productive at least of partial relief.

Throughout the middle and latter periods of the attack, or growing state of excessive collapse, strong and warm punch, with warm aromatic draughts, to as great an extent as the stomach would admit, were given alternately with calomel and opium. These two powerful articles of the *materia medica* were in this disease seldom (I might also say never, as far as my observation went,) attended with their usual specific results. Neither stimulus, excitement, nor ptyalism followed, although given to a startling extent, not in grains or drops, but by scruples, drachms, and spoonsful! This conclusion could only be inferred from the recovered cases, of course, which I carefully attended to, and with the utmost anxiety, lest dangerous stupor, coma, or salivation might, after all, snatch my patient away.

The mortality and frequency of the complaint at length became so alarming, that the regiment was embarked and ordered to sea, before quite ready, with the hope of getting beyond its range.

During this short stay at Madras, preparing for the Burman expedition, the deaths may have averaged seven or eight per day, chiefly from cholera. Indeed, such was the violence, rapidity, and frequency of attack, from inflammatory and congestive cholera and bilious synocha, that for five or six days, I might with great truth assert, I had scarcely one hour's unbroken rest or leisure, and that the lancet or prescribing pen had not been out of my hand for several succeeding hours together.

A great number would appear to have carried the *materies morbi* with them on board, as about twenty-five out of two hundred in a transport under my charge were attacked with cholera of the same kind, in the course of the voyage. Of these, three died; the remainder became quickly convalescent, notwithstanding the debilitating and other effects of profuse depletion, opium, and calomel.

For the first few days on board, my difficulties were rather appalling: labouring under illness myself, severe

enough, I thought, to render me incapable of exertion, and without the assistance so abundantly procurable in India under other circumstances; as the servants engaged and unfortunately paid too largely in advance, had all ran away at the moment of embarkation. Thus situated, I had to request the assistance of such of the soldiers as could be induced to volunteer for hospital duties; duties which, in India, Europeans are seldom or never called on to perform, and which, of course, they had the greatest repugnance to. This feeling of repugnance became soon in a great measure insurmountable, from a dread of infection having taken possession of their minds, and it must be admitted with, to them, some show of reason, as three of the men, some days on board, and up to this time in apparent good health, were soon seized with cholera, as they were attending to the wants of their comrades sinking under the same complaint. One of these orderlies quickly became a martyr, as they considered then, in the execution of the duty imposed on him, but to which he devoted himself with energy and perseverance: the two others had nearly shared the same fate.

During this period of apprehended infection, I had to remain in the hospital birth several hours each day, for some days, before I could divest those about me of their unfounded fears. However, my perfect immunity and confidence soon excited a similarity of feeling on their parts, and with flattering results, as I did not lose another man for the remainder of the voyage.

This sketch of cholera, as met with occasionally, not only at Madras, but along the Malabar and Coromandel coasts, as well as throughout a large portion of the Madras presidency which I have traversed, is the result of as much attentive observation and comparison as I could have exerted. I set myself down to the contemplation of this most dreadful scourge with a mind as much divested of preconceived theory and bias as could well have been effected under the great variety of circumstances presenting themselves, but still, with all this aptitude for free inquiry, I observed little or nothing for a satisfactory conclusion, unless that many, if not most, of the alleged exciting causes had no foundation in fact.

It has been said to occur most frequently at night; to have arisen from suppressed perspiration, or a rapid transition from a high to a lower range of temperature; whereas the opposite in all was as often the case.

The absence or presence of the sun evinced little influ-

ence, at least as an immediately exciting cause, the attacks being, of the two periods, more frequent during the day than at night. Still less could it be said to have arisen from suppressed perspiration, or atmospheric vicissitude, as the men, off duty for days, and in their barrack rooms, would have had little occasion for exposure or exertion that could induce dangerous perspiration, yet these men were affected to as great an extent as the others.

Neither age, sex, nor other personal circumstance, seemed productive of any peculiar exemption. The child, the man, or the woman, of any colour or age, were alike susceptible of its violence.

I have known the child, within doors, attacked at the same time and to an equal degree with her father, who was absent on business six or eight hundred yards; and the sympathy, during recovery, which took place in both, was as remarkable as at the beginning of the complaint. The father had been away for hours, of course, may be said to have been more or less exposed; but the child, who became ill some time before his arrival, but precisely at the same period of attack, as subsequently ascertained, was coolly and quietly amusing herself in a large and comfortable room, with the advantage of being open to the seabreeze.

Indian cholera having been so ably treated of by others, and with such superior research and accuracy as to leave little original or new for my limited range of inquiry, would perhaps not have been entered upon at all, but for comparative effect with the mortality of Burmah. In the epidemic cholera of India, as affecting Europeans in good or tolerable health, the cerebral disturbance, unequal nervous excitement, and consequent reaction, would lead to the inference that the cranial contents had sustained the first shock of disease, to which a new or different mode of action from that in the bilious remittent is soon superinduced.

The distribution of the nervous energy becomes unequal and irregular. The muscles are thrown, more or less, into a state of spasm, communicating a like irregularity to the circulating fluid, soon becoming in itself the cause of more complicated mischief. Increased determination of blood to the head, as well as cerebral nervous excitement, must produce corresponding derangement and congestion in other parts, particularly those with a complex vascular structure and a secreting function. Wherefore it is that the head, stomach, and liver are in a state of such functional disturbance and unequal derangement: still these organs very

seldom exhibit, in the most violent cases, any sufficient appearance of morbid structural injury to account for the fatal result.

In the Burman cholera, on the other hand, a tendency to cerebral disturbance, increased vascular action, or hepatic congestion, was scarcely ever to be observed. The *vita* was almost invariably so overpowered, that reaction could not be brought about by any effort of medicinal stimulus, or relief from spasm by opiates or friction to any extent. Indeed, in the immense majority of these cases, the state of collapse and progress to dissolution were so great, that the patient would appear in *articulo mortis* before he could be well received in hospital; and if the spasm and extreme collapse did not at the time give to this destructive malady its peculiar characteristics, the nosologist might feel at a loss what class or order to place it in.

Although in India little certain, beyond terrestrial exhalation and a particular state of the atmosphere, can be set down as the proximate or remote sources of cholera; in Burmah, extreme debility, or great exhaustion, would appear to be the immediate causes, to which atmospheric morbid impregnation might have superadded a specific and fatal action. But we can be at no loss for remote or predisposing causes, when we recur to the catalogue of extreme fatigue, incessant exposure, and an hitherto unheard-of privation, to which the soldier was for a time subjected, and of which an imperfect outline was given before. To these may be added the debilitating effects of the febrile epidemic pervading the whole force in the first instance, so fatal to many, and necessarily so productive of an excessively morbid disposition in those who survived its attack.

Dysentery, of the most irremediable description, next presented itself, sweeping off the greater part of those who survived the prior forms of disease, as well as extending its baneful visitation to those comparative few who had been hitherto exempt from illness. In tracing its causes, we can have little occasion to go beyond the exposure and fatigue already pointed out, and the state of inanition which the soldier would sometimes bear to a certain extent, sooner than have recourse to the highly unsound provisions at this time served out. It would, indeed, be rather inconsistent with facts founded on such privation and suffering, to lay down repletion as in the remotest degree auxiliary to morbid agency. Where the rations were not merely insufficient, but for a long period so bad as to be wholly incapable of affording either sustenance or stimulus to the

man called upon, to such an unprecedented degree, for exertion and energy. Those rations alone might, therefore, be set down as chief and foremost in the list of predisponent causes; as, although so little capable of nutriment, yet their morbid action on the intestinal canal must be in an inverse ratio to the little they possessed.

Without seeking in any peculiar state of the atmosphere as an exciting or predisponent cause of this unusual form of dysentery, it will, perhaps, be admitted that enough of tangible grounds are furnished in this slight detail. We can be, therefore, at little loss to account for the low state of general excitement, the absence of inflammatory action, the accompanying pyrexia, resembling more the typhoid type, or rather what would have marked the scorbutic state of the system as fully developed.

This appearance of scurvy gave a peculiar character to the disease in almost every stage of its progress. The turgid, livid, and fetid state of the gums; the countenance, whether bloated or sunken, exhibiting depraved habit of body; the ulcerated or blotched state of the legs and other parts; with the early loss of strength, incapability for exertion, and great mental depression, afford a tolerable certainty of this state of the system; and, combined as it was with severe dysentery, made it no less unmanageable than hopeless. It would, therefore, rarely admit of depletion, notwithstanding great abdominal uneasiness with tension, as also tormina, tenesmus, and discharge of blood; in fact, wherever it was practised, the fatal catastrophe seemed to have been hurried on. Mercury, too, in a short time was obliged to be discontinued, as, although it might, for this short period, in some cases produce a temporary relief from the more urgent symptoms, yet, as soon as its proper action would appear, the whole train of symptoms, scorbutic and dysenteric, often underwent such increased exasperation as not to admit of its further exhibition. Our treatment, therefore, was limited to palliatives in every possible form; such as fomentations, topical bleedings, mild purgatives, anodynes, blisters, frequent opiate and other enemata, &c.

Cholera, in a state of collapse, would sometimes show itself in this form of dysentery, and in general quickly terminate the patient's sufferings.

Now and then a solitary case has occurred where the collapse was successfully resisted by active stimuli, at first rather despairingly ventured on, in consequence of the pre-existing abdominal irritation; and yet in this latter relief

was had also to an unexpected extent ; so that wine, opium, and diluted spirit, were afterwards freely administered in this alone, and with obvious benefit, but, alas, too often transient and illusory.

Mercury having been found to exasperate all the symptoms, both scorbutic and intestinal, was generally laid aside, and an attempt made to improve the scorbutic state of the system merely by regimen and diet; at least, such a course as our situation would admit of procuring. Light and nutritious broths and jellies, animal and vegetable, were given in every form that could gratify the feelings of the patient. Vegetables and fruits, (plantains, pineapples, and limes, the only procurable ones,) were also tried, but at length obliged to be discontinued; as, although the symptoms more purely scorbutic would seem to have improved, the dysentery was increased, and rapidly advancing to a fatal conclusion: yet this was suspended in a few cases by giving six or twelve ounces of wine per day, with twelve or sixteen grains Pulv. Ipecac. compos. twice or three times in the same period, according to the urgency of the symptoms; or two pills every third hour, ex Opii gr. $\frac{1}{2}$, Pulv. Ipecac., Pilul. Hydr. aa gr. ij. M. singula. The small quantity of bluepill, thus combined, was seldom attended with any mercurial effect, but would seem to be a useful adjuvant in this soothing, and by the patient much-wished-for, medicine; being in general found the best calculated for smoothing the unhappy man's passage to the grave, as a probable escape from it he had early taught his mind not to entertain the most distant hope of.

The symptoms in this combination of disease, or scorbuto-dysentery, were, *ab initio*, tolerably marked; as were also their progressive accompaniment and mutual reaction, with, of course, their consequent exasperation. Still the disease rarely proceeded to a fatal termination with that rapidity which so strongly characterizes the idiopathic form of Indian dysentery, yet with much greater certainty.

That speedy tendency to organic lesion which takes place in the one, unless counteracted by profuse bleeding, mercurials, &c. would appear to be retarded in the other (where these remedial means are inadmissible) by the extraordinary modification impressed upon it, or arising from, the scorbutic action on the system. This diathesis, giving rise to more or less prostration of strength, diminished nervous and vascular energy, the remoter, although more certain, destruction of the organ or viscus particularly affected, may be thus accounted for.

In two or three cases only the scorbutic action evinced any fatal predominance; one more particularly in the Tavoy anchorage, September 1824.

In this case, the usual symptoms of both diseases were at first distinctly marked, but in a few days the gums evinced a high degree of fetor and virulent ulceration. The ulcerative process soon put on the most malignant and phagedenic form. The gums, lips, and tongue were attacked with extraordinary rapidity; the entire flesh and integuments of the lower jaw and contiguous portions of the neck, with the tongue enormously swollen and protruded, were all soon involved, as it were, in the highest and most destructive species of sphacelation, presenting the most hideous appearance that can well be imagined. As this man was one of the comparative few who hitherto escaped illness, and being apparently plethoric, with a robust form, although with rather a feeble pulse, was bled largely, i. e. *ad deliquium*, on the first day of the complaint assuming this destructive character, but without the slightest benefit, as it, on the contrary, evinced greater violence. Acids, opium, bark, wine, antiseptic applications, &c. in every variety of form, were then had recourse to, but ineffectually, as he died early on the fourth day. Yet, notwithstanding the most careful examination, we could not find, in the post-mortem appearances, any thing to account for this singularly rapid and horrible result.

The intestines evinced a good deal of vascularity, with flatulent distention, and incipient lividity in the peritoneum; but this could not in any degree have added to the frightful destruction about the mouth. The pharynx, œsophagus, and larynx were unaltered, except in the immediate neighbourhood of the morbid action, where a limited redness would seem to mark the approach, perhaps, to a line of separation, if the profuse hemorrhage and excessive prostration of strength had not speedily overwhelmed the patient. The corrosive action was so great as soon to involve every thing in its ravages, skin, muscles, tendons, cartilage, blood-vessels, the periosteum, and to a certain extent the bones themselves; three or four teeth, with their alveoli and part of either maxilla, were almost coughed out at two periods, when convulsively expectorating the blackish, broken down, putrid mass, in which no distinction of parts whatever could be observed.

This terrific affection, resembling so much the ravages of hospital gangrene, would have filled me with the greatest

dread lest it might propagate itself, in the supposed contagious manner of that disease, being then on board a crowded hospital ship, with men labouring under scorbutic dysentery, cholera, and other complaints equally asthenic; of course, affording a ready and extensive field for infection. But I had long before divested my mind, in a very great degree, of the existence of any such morbid power as tropical contagion; and in this case no such agency discovered itself, occurring singly, and fortunately terminating so.

Notwithstanding this case of violent and destructive action, arising evidently from a scorbutic diathesis, the dysentery of this form was not in general rapid in its progress, although so unmanageable and almost invariably so fatal; yet the post-mortem appearances, in most cases, would mark very severe disease.

The peritoneum lining the abdominal cavity was in general highly vascular, with some dark and livid patches interspersed. The livor in some had amounted to gangrene; in others, ulceration and deposition of lymph and pus had partially taken place. The hepatic organs in general were but little affected; at least, not evincing a primary diseased action in this complaint. The spleen was sometimes enlarged and morbidly soft. The stomach and duodenum but little altered on their internal surface, while the peritoneal coat presented appearances similar to that lining the abdominal parietes. The intestines exhibited the onus of disease most severely, in fact, nearly throughout their entire canal, from the duodenum to the rectum. The canal was in many places thickened and contracted; in others, so thinned and distended as to rupture with the slightest handling. The greater portion of their peritoneal coat was livid and gangrenous, the sphacelus extending at many places through all their coats. In other portions, ulceration would appear to have made its way from within, often to a great extent, and in some places might have admitted of the passage of their fecal contents into the abdominal cavity.

Throughout a considerable portion of the jejunum, ileum, and large intestines, the mucous membrane was much abraded. This abrasion extended itself from the various points of ulceration, and was now and then covered with layers of coagulable lymph, adding to its apparent thickness, but so little organized as not to bear the slightest pressure or distention. It was, indeed, a matter of great

surprise how the peristaltic motion could have been so long borne by the intestines in this state of disorganization.

Their fecal contents exhibited great diversity of colour, consistence, and odour. Their colour alternating between a yellow, dark greenish, or lateritious brown; more frequently thin, abundant, and sometimes with shreds of abraded membrane to an unusual extent, but never containing scybalæ. The odour always highly fetid and extremely disagreeable. Pus, mucus, and blood were now and then passed in large quantity during the latter stages of the complaint, and, after death, often appeared in the intestines in a separate state.

During convalescence, the progress towards recovery was always slow, and now and then interrupted by a relapse. An apparently trifling deviation in an ordinary article of diet, such even as eating a plantain or piece of pineapple, has reproduced it.

In those cases of occasional relapse and ultimate recovery, the complaint would gradually assume the state of chronic diarrhœa, with evacuations rather frequent, uniform, and now and then consistent, without blood or mucus. The evacuations continued for a long period, eight or twelve months, or more, of a dark brown colour; scarcely ever, for this time, evincing any marked change, although some improvement and variety of diet may have been obtained. The scorbutic symptoms were the first to subside, the gums becoming healthy and clean, the cuticular affections gradually disappearing, with that renovated state of mental sensation indicative of an approach to elasticity and vigor.

[To be continued.]

MIDWIFERY.

Half-yearly Report of Cases in Midwifery, which have occurred in the Northern District of the London and Southwark Midwifery Institution. By C. WALLER, Esq. Consulting Accoucheur to the above Institution, and Lecturer on Midwifery at the Medical School, 58, Aldersgate street.

THE following is a correct list of the returns which have been made to me within the last six months. Some allowance must, of course, be made for those letters which either have not been returned, on the one hand, or have been mislaid during the half year, on the other.

July, 1828.					
Number of Women delivered.	Sex of Children.		Born alive.	Stillborn.	Presentation.
27	Males. 11	Females. 16	27	0	Natural
August.					
22	13 (1 twin case)	10	23	0	{ 22 Natural 1 Breech
September.					
24	11 (1 twin case)	14	25	0	{ 22 Natural 2 Breech 1 Face
October.					
25	15	10	24	1	{ 24 Natural 1 Footling
November.					
30	22	8	30	0	{ 29 Natural 1 Breech
December.*					
32	14	19	31	2	{ 32 Natural 1 Breech
Total, 160	86	77	160	3	

Besides these, several cases of abortion have occurred in the institution within these few months; in one or two instances, attended with large losses of blood; the patients, however, eventually recovering very well.

Remarks.—Several cases of interest have occurred since my last report. I shall first relate those which were attended with hemorrhage.

CASE I.—Mrs. H., æt. twenty-five, when taken in labour, was seized with rather a profuse hemorrhage. I was requested, by the pupil in attendance, to visit her, and found her extremely low and faint, countenance pale, pulse very feeble. In consequence of the repeated application of cold, the bleeding had nearly ceased. On examination, I found the os uteri but little dilated, the vertex presenting, no placenta to be felt, and the membranes unbroken; the patient had slight labour pains. As a measure of precaution, I ruptured the membranes, and there was no return of the discharge, the patient being safely delivered, in a few hours afterwards, of a living child.

CASE II.—Mrs. J. had been delivered about two hours: the placenta not coming away, my assistance was requested. A little before my arrival at the house, a very profuse hemorrhage came on. On applying cold and friction, the uterus was made to con-

* One twin case, in which the patient was delivered of a male and female child.

tract; but the placenta not being expelled, I introduced my hand into the uterus for the purpose of removing it, and found it pretty firmly adherent throughout the greater part of its extent. The hemorrhage immediately ceased on its removal; but the patient remained faint, and covered with a clammy perspiration for several hours. The pulse did not rise much in frequency during the bleeding, but reaction followed, and it continued rapid for several days. Besides this, there was no unpleasant symptom.

CASE III.—Was requested to see Mrs. R., who had been delivered about half an hour. The birth of the child was followed by a very sudden and profuse hemorrhage. I found her with a very ghastly countenance, and with a pulse scarcely perceptible. A little stimulus was given, and friction employed, which caused the womb to contract to a certain extent, though not sufficiently as to expel the placenta. I consequently introduced the hand to remove it, when the bleeding immediately ceased.

In this case there was no hemorrhagic reaction, the pulse, after she rallied, remaining steadily at eighty. For some time, however, this patient complained of extreme chilliness.

CASE IV.—Mrs. J. was delivered of twins, and, before the expulsion of the placenta, had lost a very large quantity of blood; which, however, appeared to have no effect upon the general constitution. The uterus appeared to contract well, and the placenta readily came away, every thing appearing to be going on well. In about ten minutes, however, she was seized with a deadly syncope, although no blood passed out of the vagina. On examining the uterus through the abdominal covering, it was found to be slightly enlarged, though to no great extent. On pressing firmly upon the fundus uteri, so as to double it, as it were, upon itself, a coagulum of blood, of about eight ounces, was expelled: there was no relaxation afterwards, and the patient did well, though she remained faint for some hours.

This case is interesting, as showing that, after a patient has lost a certain quantity of blood, how small a proportion in addition may produce dangerous symptoms; and is therefore a negative argument in favor of the transfusion of a quantity of blood, small in comparison to what has been lost, in order that the scale may be turned in the patient's favor.

Several other slighter cases of hemorrhage have occurred, in all of which the application of cold, combined with external friction, was sufficient.

Two or three cases of peritoneal inflammation have also happened, which were readily cured by the free use of the lancet, and the employment of calomel and opium.

In one case the child had a large tumor on the scalp, which burst before birth, and a large quantity of grumous

blood was discharged. I was requested to visit this case, the pupil conceiving, from the quantity of blood which passed away, that it was a presentation of the placenta. The precise nature of the case was not quite obvious till after the child was born, when it was observed that the tumor had occupied a considerable portion of the summit of the cranium, as the torn scalp was there greatly overlapping. Pressure was applied, and, after many hours, the hemorrhage from the wound was restrained; but the child died on the fourth day. It is a curious fact, that there was a very considerable quantity of hair growing from every part of the scalp except on the site of the tumor, and *there* it was perfectly bald.

A case of fatal inflammation, following a very severe labour, has occurred. The notes of this case were very correctly taken by my friend and pupil Mr. HARRIS DUNSFORD, and I therefore subjoin it in his own words.

"Mrs. G., aged thirty-two, of pale unhealthy appearance, a patient of the London and Southwark Institution, sent for me to attend her on Wednesday, November the 19th, at six in the evening. She has had two children before, both of which were still-born, and instruments were employed. The membranes burst the evening before I saw her, at eight o'clock, but the pains remained very trifling, occurring at long intervals. The os uteri was dilated to the size of a sixpenny piece, hard and thin. The next day (Thursday), at ten o'clock, the pains became much more severe, and came on every ten minutes or quarter of an hour, but they were confined to the loins, front and inside of the thighs. The mouth of the womb was dilated to the size of a halfcrown, and the funis presented, pulsating strongly. It was observed that the funis, a foot, a hand, and the head presented. The promontory of the sacrum was felt projecting considerably towards the pubis. The woman was very desponding, and frequently said she should never recover.

"Messrs. Waller and Doubleday saw her in the evening, (Thursday,) and were of opinion that she could not possibly be delivered by the unassisted efforts of nature, the pelvis being distorted in a high degree. Accordingly, Mr. Waller immediately proceeded to empty the uterus: pushing back the hand, he took hold of the foot, and after some difficulty brought down the leg: but, although considerable efforts were used, the breech could not be made to pass. At length, the cord no longer pulsating, it was agreed to perforate the head, which was soon effected. Extension was now again employed on the leg, but without effect. The head was perforated in another part, and a piece of calico was tied round the leg, to assist in drawing down the breech; which at length passed the upper aperture.

"The patient's pulse hitherto had been soft, slow, and regular;

but after this, and during the passage of the head, which did not come through without considerable difficulty, it increased greatly in frequency, and the woman now became very restless. The uterus did not contract immediately. A dose of the *secale cornutum* in powder, and a little gin-and-water, were given, and it then contracted pretty well, and the placenta was expelled. Two hours afterwards, forty drops of laudanum were given her.

"She did not sleep, but during the night became extremely restless, and had frequent attacks of faintness. I was fetched at four A.M., and found her with a pale, anxious countenance, hot and dry skin; furred tongue, moist at the edges, but dry in the centre; quick and feeble pulse, beating 120 in the minute. She complained of a *violent pain at the pit of the stomach*, and of soreness over the whole abdomen, increased on pressure. She has vomited once, and complains of slight nausea; is much annoyed by wind. Mr. Doubleday saw her soon after, and ordered twelve leeches to be applied to the pit of the stomach, and the following pills, one to be taken every second hour:

R. Opii gr. iij.; Hydr. Submur. gr. vj.; Antim. Tart. gr. iss. M. fiat pil. iij.

"Saw her again at twelve, and at four P.M. The leeches produced a little relief, but the pain still continued very severe; the pulse sometimes intermits; the mouth is parched, but she is unwilling to drink, as she says it increases the pain; the tongue is dry and brown, and she is constantly smacking her lips. She talks sometimes incoherently; her countenance is expressive of anxiety, and the skin covered with perspiration. The abdomen is much swollen, and there appears to be fluid in the cavity. She makes water without difficulty; the lochia have entirely ceased. Strong beef tea is given from time to time.

"Mr. Waller saw her this evening (Friday), at ten: the pulse was at 112, feeble, but regular; the countenance more natural. He ordered the following pills and mixture:

R. Opii gr. i.; Hydr. Submur. gr. ij. M. fiat pil. secunda quaque hora sumend. cum cochleariis iij. majoribus mist. sequent.

R. Sodæ Tartarizatæ ℥ss.; Syrup. Papav. ℥ss.; Aquæ Ment. Pip. ℥viij. M. fiat mist.

"Nov. 22d, eight A.M. (Saturday).—The patient has dozed a little during the night. Has occasional twitchings of the muscles of the balls of the eyes; the tongue is parched, and rather brown; pulse 108, regular, and more firm. Still complains of the pain in the epigastrium and abdomen, which is very much distended and tympanic. The skin is hot and dry; she brings up every thing she takes. A turpentine injection was given, and brought off some wind.

"In the evening, the pain in the epigastrium had ceased. A common injection was then administered, and feces were discharged.

"Mr. Waller saw her at night: the pulse was quicker and more feeble, and the countenance had assumed a cadaverous appearance.

"About an hour and a half before her death, which took place on Sunday, at one A.M., the pain in the abdomen (as the attendants state) ceased suddenly."

Sectio cadaveris, ten hours after death.—The abdominal parietes were excessively distended, but as yet putrefaction had not begun to take place. On opening the cavity, the whole of both of the peritoneal surfaces were observed to be highly inflamed, and extensively, nay almost generally, adherent to each other. A considerable clot of blood was resting on the omentum, which was tightly adherent to the intestines, among which was a large quantity of bloody serum. The uterus was large and flabby, and distended with air; its internal surface presented a uniform appearance of bloodshot vascularity, (perhaps the stain of the lochia contributed to this effect,) which towards the cervix was very dark; and here there was an uneven and somewhat lobulated appearance. (Was this owing to disease of the glands?) The vagina appeared to participate in the inflammation; as did also the bladder and rectum.

Perhaps it may be asked, why more active depletion was not in this case had recourse to? To this I would reply, that, so far as my experience in these cases goes, the disease itself, when of an extensive nature, is attended with such a complete prostration of the patient's strength, marked by the rapidity and perfectly powerless state of the pulse, that venesection appears to hasten the fatal event. I have seen several cases tending to prove this point.

The face presentation happened to a young woman in labour with her first child, and consequently the process of parturition was considerably protracted, and her sufferings increased; but the child was born living, and the mother had a good getting up.

In several cases, (some in the Institution, and some in my private practice,) I have administered the *secale cornutum*, and its effect continues to justify the favorable opinion I have before given of its powers. I find that the powder in doses of half a drachm, repeated (if necessary) in a quarter of an hour, is usually sufficient to answer the purpose.

In one instance, obstinate diarrhœa succeeded an attack of fever, which had resisted every means of cure; and the poor woman is now (seven weeks after her delivery) gradually sinking. The sulphate of copper, with opium, was used among other remedies, but without success.*

* A few days after the above was written the patient died; and, on examination, very extensive disease of the mucous glands of the large intestines was found to have taken place: some of them were as large as a pea. A considerable quantity of feculent matter was locked up in the colon.

In one instance there was repeated hemorrhage from the umbilical cord, which so weakened the infant that it died in a few days. This, I apprehend, must have arisen from disease of the arteries, as there were no less than six ligatures applied, and by three different persons, (myself among the rest;) notwithstanding which, however, the bleeding recurred at intervals, and the blood was observed to issue not from the part at which the ligature was applied, but from the extremity of the funis.

CORPUSCLES IN THE EYE.

Remarkable Case of Corpuscles freely moving both in the Vitreous Humor and in the posterior Chamber of the Eye, and causing the imaginary Perception of Objects.

ON the 17th August, M. Galy, surgeon of the Hospital of Périgneux, consulted M. Parfait-Landrau on the case of M. Audebert, formerly a magistrate, then in his seventieth year, and of a bilio-sanguineous temperament: he was subject to wandering pains, resembling those of rheumatism, and had for several years experienced an alteration in regard to the sight of his right eye, of which he feared the consequences, although the affection had remained a long while stationary. He sees *muscæ volitantes*, black points, and other images, of various shapes, &c, which have been so well described by M. Demours, in a memoir which he recently read to the Academy.

After an attentive examination of the patient's pupils, which were rather contracted, M. Parfait-Landrau thought that he could perceive certain corpuscles moving apparently at the bottom of the posterior chamber of the right eye, and shining with a sort of phosphoric brilliancy. As these phenomena were new, and of a most interesting description, he did not hastily admit the evidence of his senses, but doubted the correctness of first thoughts; and, on the supposition that what appeared to be in the eye might be really nothing more than the reflection of external objects, (although they were not apparent in the sound eye,) he proposed to the patient and his medical attendant that the pupil should be dilated by the extract of belladonna. The pupil was by this means thoroughly dilated, and MM. Parfait-Landrau and Galy distinctly perceived a considerable number of corpuscles, which in general resembled finely powdered liquorice, and a few had the brilliancy of fine gold dust. These particles moved to and fro throughout the whole extent of the posterior chamber, when

the eye became fixed, they descended; when it moved, they were again agitated as before; and thus on in succession.

M. Parfait-Landrau is firmly of opinion that these substances were in the vitreous humor, as they were numerous and sufficiently near to be distinctly seen with the naked eye, although he employed a magnifying glass in his examination of them.

This new discovery of an evident and physical cause for that which the ancients called *perpetual imagination*, which the moderns have since attributed to the state of the internal membranes of the eye, to varicose veins in its humors or membranes, is the more remarkable, as no similar phenomenon is described in any work professing to treat of these matters. M. Demours thinks that one of the causes of these *muscæ volitantes* is due to the humor of Morgagni, in which he supposes there are small portions which, without losing their transparency, become more dense, ponderous, and refractive. Other practitioners, equally respectable, consider them to be produced by the aqueous humor; and our author allows that they cannot, in every case, result from the phenomenon which is the subject of the present paper. He therefore does not attempt to refute the various opinions to which they have given rise. He agrees with M. Demours in stating that these *corpuscula volitantia* rise with the movement of the eye, but immediately afterwards fall to its most dependent part, whatever may be the precise position of the eye itself. This curious fact may be readily explained in the present patient, but certainly it is not quite so intelligible in those cases where it is attributed to the development of varicose veins in the humors or internal membranes of the eye. It is alike inexplicable on the supposition that it is the effect of partial paralysis of the retina.

In order that these corpuscles might move about in the vitreous humor, the hyaloid membrane which forms its cells must be first destroyed; the natural consequence of which is a considerable reduction in the density of that humor; and it is well known that this alteration may exist without preventing the other parts of the eye from performing their respective functions. For there is scarcely an oculist in the habit of operating for cataract by extraction of the lens, who has not found in some patients the vitreous almost as fluid as the aqueous humor, without preventing the success of such operations. And thus we see that the crystalline humor may, without evident cause, entirely dissolve within

its membranous sac, and occasion no alteration in other parts of the eye.

That, in the case of M. Audebert, these corpuscles which appear to move in the vitreous humor, are not contained in its cells, and do not owe their movement to the undulation of this humor, (if it should be deemed capable of undulation,) is proved by the fact that, when the eye moves, they are seen very distinctly rising from the bottom, and traversing the whole posterior chamber. Again, as soon as the eye is stationary, they are seen descending to their former situation; upon which the eye becomes clear, and the patient no longer perceives the *muscæ volitantes*.

This is certainly a singular phenomenon: but it might, perhaps, have been occasionally observed if the pupils had been always artificially dilated in the examination of similar cases.

M. Audebert reads with the affected eye, and feels no pain in it: the pupil duly contracts and dilates, and all the parts of his eye, the vitreous humor excepted, present no morbid appearances.

Four days after the first investigation, the eye was again examined in the presence of MM. Galey and Renaud, surgeons, and of Dr. Vidal, member of the medical jury of the department, and head physician to the hospital; all of whom testify to the truth of the above statement.

HOSPITAL REPORTS,

(Principally condensed from various Periodical Publications.)

HERNIA.

Case of Strangulated Crural Hernia, which, after Gangrene had supervened, was cured by an artificial Opening of the Tumor.

By Dr. J. J. CAFFORT, Surgeon of the HÔTEL DIEU at Narbonne.

THERE are many cases on record of strangulated hernia with gangrene, which were spontaneously cured by the rupture of the sac and intestine, followed by the discharge of the feces through the opening; and some cases are related in which the opening closed of its own accord, after a longer or shorter continuance. Professor Scarpa, who attentively studied the *modus sanandi* in such cases, was of opinion that, in similar circumstances, we ought always to imitate this process which nature sometimes adopts, by opening the hernial tumor with the knife, and cutting away

the gut itself, should the exigency of the case require it. Notwithstanding so great an authority, and several facts which tend to establish the soundness of his advice, some surgeons still hesitate, and are afraid to adopt this method. Since, however, this is the only means by which, in desperate cases, we may hope to snatch our patients from almost certain death, all timidity is culpable, and we ought to operate without the least hesitation.

The following case, while it confirms the utility of this practice, presents some striking particulars.

Paul Pech, gardener, æt. twenty-eight, of a robust constitution, was affected for about two years with crural hernia on the left side, which was become irreducible. Notwithstanding this, as it was rather small, Pech was scarcely incommoded by it, and would never submit to the trouble of wearing a bandage.

On the 4th April, 1825, after eating and drinking to excess, and dancing all night, he felt an acute pain in the hernia, which in a short time became extremely voluminous. Symptoms of strangulation having supervened, the village surgeon was called in. Although the patient referred the pain to the hernia, he believed the disorder to be common gastro-enteritis, and ordered leeches to be applied to the epigastrium. As they did not assuage the pain, and as the symptoms of the disease assumed a more formidable aspect, a physician of Narbonne was sent for. He immediately recognised the complaint, and recommended that a surgeon should be brought to the patient as soon as possible. This prudent advice was not adopted till two days afterwards, when the surgeon who came to see the patient finding that all pain had subsided, and that the pulse was small, and perceiving besides all the symptoms which usually indicate actual gangrene, did not venture an operation, which he believed could not be practised with success, and preferred leaving the patient to the care of nature alone.

Pech's state continued to grow worse up to the 14th of April, when all the symptoms became rather milder, and he passed one scanty dejection. The improvement he was experiencing being noticed, he was carried on the 15th to the hospital of Narbonne. M. Cafford found him, on his arrival, in the following state: His countenance anxious; his tongue red at the sides and black in the middle; his abdomen tense and painful; in the left groin a voluminous, hard, round tumor, the circumference of which was red, and the centre rather black, in which part fluctuation was then apparent.

From these symptoms M. Cafford concluded that the gangrene was arrested, and that an inflammatory process for the separation of the dead parts had already commenced; and the reappearance of the stools since yesterday, and the cessation of vomiting, led him to presume that the omentum alone formed the hernia. He thought it would be proper to assist the operations of nature by

opening the tumor transversely. When the incision was made through the skin into the sac, a small quantity of pus flowed forth, and he perceived a dark-coloured substance, which, upon inspection, was found to be the omentum in a state of gangrene, and very fetid. Being unable to disentangle it, he was obliged to cut out the greater part. A simple pledget of lint was afterwards applied to the wound, and, as the inflammatory redness was very considerable, a poultice was laid over the whole.

On the 16th, when the dressings were removed, a great quantity of serum issued forth from the wound, and the redness of the contiguous parts was diminished. Another piece of omentum was cut away. Although the local disease was sensibly lessened, Pech was still affected with much fever, and was very thirsty; he had passed no stool, and the tenderness of his abdomen was increased. Yet all these symptoms appeared attributable to his having taken food, contrary to orders. He is now, therefore, only allowed rice water for food.

17th.—The bottom of the wound being exposed, a very large lumbricus was found there, the presence of which removed all doubt as to the perforation of the intestine. This day the redness along the spine of the ilia reappeared: it existed when the patient first entered the hospital, but yesterday it appeared to be quite removed by the poultice. The sort of serum which comes through the wound is so abundant that, during the intervals of dressing it, the bed was completely soaked by that fluid; and, on pressing the abdomen, it spirted out with considerable force; and was so extremely acrid that it greatly irritated the edges of the wound, and produced erysipelatous inflammation of the scrotum. There is an improvement in the general symptoms, and the bowels have been moved by a clyster.

Up to the 21st, the patient became daily better, barring the redness of the scrotum and over the spine of the ilia, which has considerably increased, and in the former situation two ulcerations have developed themselves. The patient was gradually allowed to partake of vegetable soups, and finally too of those made from meat. During all this time some portion of the food was found on the dressings when the wound was examined. The serum, although still abundant, is, however, much diminished. His bowels are kept open by the use of clysters.

On the 23d, M. Caffort perceived a distinct fluctuation on a level with the anterior third of the spine of the ilia, into which he made an opening, whence a small quantity of pus escaped. Meanwhile the wound in the groin, now much smaller, discharged a still less quantity of serum. The patient's appetite and digestion are good, and scarcely any food escapes through the wound. The opening Dr. C. had made into the abscess which was near the spine of the ilia became enlarged, and a piece of omentum, above four inches long, and twisted like a cord, was discharged through it on the 25th. That it was really omentum, Dr. C. was at first himself

inclined to doubt, till he had clearly ascertained the fact by unfolding it with care in the presence of several surgeons, who were equally surprised. From that instant all the wounds began to heal: those of the scrotum and ilia were quite cicatrised by the beginning of May, and on the 28th of the same month the patient left the hospital quite well, with the exception that there remained still in the centre of the cicatrix of the groin an almost imperceptible aperture, that continued to exhale a serous fluid, which slightly soiled the shirt.

Some time after quitting the hospital, the patient having, contrary to Dr. C.'s advice, indulged himself in eating too much at once, the cicatrix burst, and the food was again discharged through the wound; but this accident was speedily remedied by repose and strict attention to diet. He has since married, and has not experienced any return of pain in the part.

This case shows how important it is to open the sac as well as the intestine in cases of hernia with gangrene, either as a substitute for the inflammatory process, (which sometimes fails,) or to promote its effects when it has begun to develop itself. Many similar cases might be cited in support of this opinion, but the one just related presents a most singular fact, viz. the evacuation of a large piece of omentum by an abscess near the spine of the ilia. Why was not this portion of omentum expelled through the wound in the groin? Dr. C. conceives that, when he opened the sac, the omentum was already incarcerated under the spine of the ilia, to which he attributes both his inability to disentangle the omentum there, and the difficulty with which he discovered the perforation of the gut. After he had cut out the portion of omentum which the sac contained, the remainder continued its course, until it finally made its exit through the abscess at the spine of the ilia.

The vast quantity of serum (at least a quart) which was discharged during the intervals of dressing the wound, is a very interesting fact. The slightest exertion on the part of the patient rendered this discharge still more copious. It evidently issued from the cavity of the peritoneum, and if there had been here, as in all known cases, a complete adherence between the omentum, the intestine, and the margins of the hernial opening, this serum would have inevitably caused, by its acrimony and abundance, a most intense peritonitis, and probably death itself.

LITHOTOMY.

Case of Lithotomy, (the subject of the Libel in the Lancet)

By BRANSBY B. COOPER, Esq.

STEPHEN POLLARD, æt. fifty-three, of a plethoric habit, but portraying want of constitutional power, admitted into Job's Ward, GUY'S HOSPITAL, March 7, 1828. He states that he has been subject to a gravelly deposit in his urine for seven years, and a twelvemonth after its first appearance he was attacked with excruciating pain in the region of the right kidney, which was constant and severe, and confined him to his bed for three months; at the end of which time he voided a stone with his urine, about the size of a barleycorn. Subsequent to this his health became re-established, suffering but a slight inconvenience from the sediment in his urine, which remained unaltered. In three years a second attack, similar to the first, took place on the opposite or left side; the same symptoms supervened, and at the end of a fortnight he voided another calculus, of nearly an equal size with the first. He soon recovered his health, and the gravelly sediment, though continuing, has latterly been much diminished in quantity. About a twelvemonth ago, unusual irritation in his bladder attracted his notice, which rapidly increased, causing a difficulty in micturition, the urine suddenly stopping, and the complete evacuation of the bladder inducing intense suffering. At length he was obliged to apply to a surgeon, who advised his coming to Guy's Hospital.

Upon his admission, he stated that his journey to town from Sussex, in a cart not hung on springs, gave him great uneasiness, producing frequent inclinations to void his urine. Walking also increases the symptoms. The pain is most considerable when the bladder is empty. The extremity of the prepuce is not much swollen, neither has he ever passed bloody urine. The sound being introduced, indicated the presence of a hard calculus. His general health not much impaired, but suffering from a slight catarrh, from exposure during his coming to London.

The operation was performed on Tuesday, the 18th of March. The sound being introduced, the calculus was felt with difficulty, and then only while withdrawing the instrument. The narrowness of the perineum excited attention. The straight staff being introduced, the external incision was purposely extended beyond the usual length, to compensate for the natural deformity. The groove of the staff was cut into, and the knife readily passed into the bladder, as indicated by the flow of a small quantity of urine. On passing my finger into the wound, the extent of the section of the prostate could not be ascertained, in consequence of the depth of the perineum; and, upon introducing the forceps, the stone could not be felt; I was, therefore, induced to enlarge the opening by means of Sir Astley Cooper's beaked knife. I then withdrew the straight staff, passed a curved one into the bladder, and detected the stone in the concavity of the curve, and, to secure the

passage into the bladder, "passed the cutting gorget (which was necessarily furnished with a beak), and used this as a guide to the introduction of the forceps; but still, though the forceps passed readily into the bladder, as was experienced by Mr. Callaway as well as myself, the stone eluded detection. A female staff was then passed into the wound, but could not be brought in contact with the stone. A male sound was next introduced through the incision into the bladder, and with some difficulty indicated the stone *above* the prostate, and consequently *behind* the pubes; and at length the blades of the forceps (the handles being directed downwards and backwards,) were brought in contact with the calculus, which, immediately on being felt, was extracted without any force, although, from the circumstances above detailed, the operation had unavoidably been tedious. When he was replaced in bed, he felt depressed and exhausted. Forty drops of laudanum were given, which produced slight composure, but no sleep.

Five o'clock.—Complains of very acute pain in the lower part of the abdomen, especially in the left iliac region; this increases on pressure. No tension of the abdomen is discernible.

Apply thirty leeches, and hot fomentations.

Ten o'clock.—The pulse has increased in number to 116, and is tremulous. The pain of the abdomen unrelieved by the leeches. The breathing is hurried, and the skin bedewed with a clammy perspiration. The countenance is natural. Answers questions with great composure.

Ordered Hyd. Subm. gr. iij.; Ext. Opii gr. ij. M. to be taken directly.

—A large emollient poultice to cover the whole of the abdomen.

March 19th, one o'clock A.M.—Has not had any sleep. The tenderness of the abdomen undiminished; pulse 120, small, with a degree of hardness. For the last half hour has had nausea, and insufficient efforts to vomit, which greatly distress him, by increasing the pain.

Repeat the calomel and opium.

Five o'clock.—The pain in the abdomen is increased; the pulse 120, small, and hard; respiration difficult; nausea unabated.

V.S. ad 3x.

This relieved the urgency of his symptoms, but was followed with depression.

Ordered Hyd. Subm. gr. iij.; Opii Ext. gr. i. stat.—Cont^d Cataplasma.

Ten o'clock.—The pain in abdomen continues; pulse as quick as in last report; tongue covered with a white fur, but moist; nausea still present, even rather more urgent. A sinapism ordered to be applied to the pit of the stomach, and thirty leeches to the abdomen. These gave immediate relief, to such an extent as to enable him to sleep.

One o'clock P.M.—Pulse 156, and irregular as to power, but constant in number. The anxiety of countenance indicates a fatal depression, and has a peculiar yellow hue, the lips being pale.

The nausea has returned, and the pain of the abdomen is only complained of during the spasm. The respiration is short, hurried, and attended with pain.

R. Ammon. Carb. gr. iv.; Tr. Opii gr. xxiv.; Infus. Serpent. ʒiss.
fiat haust. to be taken directly.

After having taken this draught he slept two hours, when the respiration was twenty-six in a minute. He awoke in an alarming state of depression, the countenance anxious and pallid; he reluctantly answered questions, but said he was entirely free from pain. He took a small quantity of brandy-and-water, with the julep of ammonia, but continued gradually sinking until half past seven, when he died.

It may be worthy of remark, that this patient felt convinced in his own mind that the operation would prove fatal; and so strong was this impression, that he persuaded two patients in the same ward to show him the burial ground of the hospital. He visited this, and expressed his conviction that it would be *his* resting place.

Examination of the body, sixty hours after death. (From the notes of Dr. HODGKIN.)—The peritoneum, at the lower part of the abdomen, as well as that portion which lines the parietes and that covering the intestines, was minutely injected. In the pelvis there was some sero-sanguineous effusion, very slightly puriform, and unmixed with lymph or flocculi. Behind the peritoneum, in the posterior part of the left iliac region, there was some ecchymosis. The cellular membrane behind the peritoneum in the pelvis was extremely lacerable, readily breaking down under the finger, and scarcely requiring the use of the knife for the removal, except under the pubes. There was a free division of the prostate, and a clean cut into the bladder, the mucous membrane of which was generally healthy. Immediately behind the meatus urinarius there was a small tongue-shaped body, which, on the opening of the bladder, and when obscured by coagula, was considered to be the third lobe of the prostate; but a more careful examination proved it to be a small flap, composed of a portion of bladder and prostate, and which had been formed by another incision communicating with the first, about an inch in length, and a third of an inch behind the opening of the meatus. There were a few spots of the ecchymosis and abrasion comprehended in a space of about the size of a shilling around the orifice of the meatus. The edges of the incision, from the external opening to the bladder, were ragged, and intermixed with adherent coagula of blood; a state which was unavoidably produced by the repeated introduction of the forceps and other instruments which were had recourse to in the attempt to remove the stone.

In the preparation, a passage exists at the side of the bladder. This was not noticed by Dr. Hodgkin till after it had been in the hands of the reporter of the Lancet; and, from the extremely lacer-

rable state of the part, it might easily have been formed after its removal from the body. That it was either formed then or in the act of removing them, is an idea which the absence of coagula tends strongly to confirm.

Besides the injection of the peritoneal coat of the small intestines, the internal membrane was of a diffused red. The rectum was perfectly sound and healthy, with the exception of a very slight appearance of piles. The kidneys were of a moderate size, soft and flabby, and in an advanced stage of the light mottling deposit described by Dr. Bright.

This case resembles all those of unsuccessful lithotomy which I have myself had an opportunity of examining, both in the peritoneal inflammation and in the extensively lacerable state of the cellular membrane behind the peritoneum. Similar results have, I believe, invariably been found by Mr. C. A. Key in this country, and by my friend, Harvey de Chegoin, in Paris.

The peculiar derangement of the kidney observed in this case was likewise met with in a patient of Mr. C. A. Key's, who died after an operation for the stone; and has likewise been found in others who have sunk after the operation or accident.

*Case of Lithotomy, with unusual Difficulty in the Operation, at the
WINCHESTER HOSPITAL. By Mr. W. J. WICKHAM, Jun.*

GEORGE LOCK, æt. four years, was admitted with calculus in the bladder into the Winchester County Hospital, November 12, 1828. The symptoms of stone had commenced when he was about fourteen months old; his health was otherwise good, but he was somewhat emaciated from continued and very great suffering.

Nov. 25th.—*Operation.*—The process of sounding being duly accomplished, and the existence of a stone having been distinctly ascertained, the operation proceeded as follows: By one plunge of the knife the first incision was effected, and the urethra opened near the prostate gland; the beak of the gorget was at once lodged in the groove of the staff, and passed onwards into the bladder. The arrival of the gorget in the bladder was not announced by a gush of urine, as it had been voided entirely on the introduction of the staff. I now passed my finger at once into the wound, and felt the stone at the fore and upper part of the bladder, towards the pubes. I then introduced the forceps, and felt the stone in the situation I had found it with my finger; but it was not bared, a substance evidently intervening between the forceps and the stone. I withdrew the forceps, and again passed my finger, but did not feel the stone exposed. At the moment I conceived that the forceps, and my finger on its second introduc-

tion, had found their way between the bladder and the rectum. I next introduced the staff, and passed my finger along it into the bladder, by which I was immediately conducted to the stone; but I thought the opening had not been made sufficiently large by the gorget, therefore dilated it by a very slight effort with my finger. The stone being completely exposed, I passed in the forceps again, and took away the calculus without any difficulty. The time occupied by the operation was eight minutes. The boy bore it well.

No untoward symptom occurred afterwards until about the eighth day, when the water returned to its accustomed course, which was attended by severe pain, the boy screaming very loudly at each effort to make water. This continued till the fourteenth day, the wound having appeared foul, and the surrounding parts inflamed, for two or three days previously, when a substance came away from the wound having the following appearance:

It is a cyst, apparently of the same structure as the bladder; its size is sufficient to contain the calculus, which weighed two drachms; the opening into it is just large enough to admit of its exit, and its whole internal surface is lined with calculous matter, in fact, studded with large pieces of calculi.

Since the coming away of the cyst, the wound has continued to improve in appearance daily, and is now (December 27th) nearly healed. The water passes in its natural channel.

Reflections.—I have no hesitation in pronouncing the substance voided by the wound to be a cyst, in which the stone was contained previous to the operation. Its appearance, its size, its being lined with calculous matter, and the opening into it being ragged and just large enough to admit of the stone passing out of it, are circumstances decisive of its nature.

By every examination the stone was found to be in the same situation; and by several surgeons in the country, previous to his admission, it had been pronounced that no stone existed.

The existence of the stone in the cyst, by which it was almost wholly covered, produced the embarrassment in the operation.

It is evident that the gorget opened the bladder *sufficiently*, or the stone could not have been taken out. It is also clear that the forceps and finger were *really* passed into the bladder, and not, as *feared*, behind it; but that they overreached the only part of the stone which was exposed to the cavity of the bladder.

The difficulty in this case was much increased by the youth of the child, and consequently the incomplete development of parts, by which one part could hardly be dis-

tinguished from another. The urine also escaped before the introduction of the gorget, which rendered its entrance into the bladder doubtful.

I am anxious to bring this case into notice, because I believe the occurrence to be uncommon, having never met with or heard of a similar case. But I am desirous of bringing it forward at this particular time, because the public seem unwilling to believe that there are difficulties in the operation for the stone; because it is supposed that this operation (concerning which more has in every age been written, and as to the mode of performing it more differences of opinion have existed than in any other operation in surgery,) has now all at once lost all its terrors, both to the patient and operator. In fact, it is considered that no patient need, under any circumstances, be lost from it, and that no operator should exceed a few minutes by his pupil's watch.

The unfortunate case of Mr. Bransby Cooper, which has of late appeared before the public, and has been stigmatised in such disgusting, unmerited, and libellous terms, demands that all should be done to recover it from the imputations cast upon it, not only for the vindication of the operator, whose character stands on the first authority of this country, but for the benefit of all men who are engaged in situations which oblige them to operate before numerous spectators.

The above case was one which fortunately was not protracted; but the same circumstances might have led to its further delay, and even its noncompletion. And again, had not the cyst come away, the difficulties would have remained unexplained, and been attributed to unskilfulness and want of dexterity, as imputed to Mr. B. Cooper.

TETANUS.

Case of Tetanus which proved fatal, showing a remarkable Alteration of the Medulla Spinalis. By Dr. POGGI. (HÔPITAL D'UDINE.)

A WOMAN, aged forty-four, who was accustomed to remain for some time with her legs immersed in water, experienced, on the 8th of October, a great difficulty in moving the lower jaw, with a sense of rigidity of the muscles of the neck and stiffness of the limbs. She had previously, however, had attacks of pain after walking, which were considered to be rheumatic. On the 10th of October, when she entered the hospital, the tetanic contractions

of the trunk and limbs were considerable, the trismus was violent. The latter was greatly relieved by a warm bath, but not so the other symptoms. The trunk was bent backwards, the arms and legs extended and stiff; breathing frequent and stertorous; abdominal muscles little contracted; bowels costive; urine small in quantity; pulse strong and frequent; skin hot and dry; intellectual faculties not in the least impaired, and sensation perfect in every part of the body. Thirst was great, and the tongue red and dry. The symptoms increased in intensity from the commencement until her decease, which took place five days after the attack.

The body was examined twenty-four hours after death. The brain was healthy. The spinal canal contained a larger quantity of serum than is usual, mixed with blood. The spinal arachnoid membrane presented no alteration. The pia mater showed signs of an increased action having existed, which was more apparent on the anterior than on the posterior aspect of the medulla. The medulla spinalis presented on its anterior half a multitude of granulous bodies, in size from a grain of millet to that of a lentil: it was very soft, and seemed entirely formed by the agglomeration of these globular bodies; its colour was a whitish yellow, and on its anterior surface, in different parts, small red points were to be seen. Its posterior half was perfectly healthy, and presented a remarkable difference to the anterior half. The white substance appeared to be the part that had undergone the greatest alteration, as the gray substance was apparently unaltered. The filaments of the anterior spinal nerves at their origin were sensibly diminished in thickness, and were of a yellowish colour, very soft and easily lacerated: several of them had, in their course, small tumors, such as those which were described on the anterior half of the medulla spinalis. The posterior spinal nerves, on the contrary, were healthy in appearance, and their volume and consistency were unaltered. The cavity of the chest contained a great quantity of bloody serum; the stomach and intestines exhibited slight traces of inflammation; the kidneys were of a brownish red colour, and gorged with blood; the bladder was much contracted, and contained but little urine.

This case, with others, will tend to prove that tetanus results from an affection of the spinal cord; although the singular alteration here met with seems to differ from the ordinary kind of lesions of this organ found after death, yet the appearance of great increased action of the pia mater, and the other phenomena mentioned above, show clearly that inflammation had primarily existed. And was not this the cause of the general affection, which had been improperly called rheumatism, of which the patient had complained for some time?

This case also shows the difference of the functions of

the spinal nerves: sensation being perfect until the death of the patient, and the motive powers alone being affected. These phenomena will support the opinion that the anterior spinal nerves are those of motion, and the posterior those of sensation.

HOPITAL SAINT-LOUIS.

History of a rare, and perhaps unique, Case of Cancerous Tubercles in different parts of the Body. By Dr. LUGOL.

JEAN BAPTISTE BAUJOIN, in his thirty-eighth year, tall, and of a robust constitution, had been affected in early childhood with tubercles in the neck, and with scaldhead, which disappeared at puberty. He married at one-and-twenty, and has had seven children, of whom only three survive. The eldest, a girl thirteen years old, has been scrofulous from her infancy, being habitually affected with ophthalmia and with tubercles in the neck.

Baujoin continued to enjoy excellent health till he was thirty-six years old: he was very strong, robust, and courageous, extremely industrious, and in the habit of carrying burthens of five hundred weight and upwards.

Being out of work in the country, he came to Paris, where he was employed in breaking up old boats and barges, in which occupation he was generally up to his knees in water, and constantly exposed to cold humidity; often passed the day, in the depth of winter, bathed in sweat, and the night in a low damp apartment, where, however, he lived pretty well, though he usually drank no wine.

Baujoin lived in this manner from the autumn of 1827 until the end of the following December, when some tubercles formed first in the left and then in the right side of the neck; almost immediately after, in the left armpit and groin, and nearly simultaneously in the corresponding regions of the right side. They were at first moveable, and rolled under the finger like small bullets, but increased in size so rapidly that in less than three months time they acquired the volume of a goose's egg.

At the same time that the tubercles reappeared in the neck and in the other regions just mentioned, the porrigo, which at puberty had spontaneously become well, again broke out at the posterior part of the scalp.

The isthmus of the fauces was much contracted by the swelling of the amygdalæ, which, as well as the arches and velum palati, were strongly pressed forward by the tubercles in the pharynx.

On the 26th April, 1828, when he came under the care of Dr. LUGOL, physician to the Hôpital Saint-Louis, he had been a month without swallowing either solid or liquid food. Dr. L. tried to make him drink a few spoonfuls of some very thin broth, which was soon rejected from the œsophagus; and the patient said that when liquid food, such as broth, passed through the isthmus of

the fauces, it was stopped by another obstacle, on a level with the superior third of the sternum, which seemed as it were a bar beyond which it would not go through, and which mere drink could not pass but with the greatest difficulty.

His appetite was still undiminished, but this mechanical obstacle to the deglutition of food, which had continued a month, had caused great emaciation. The limbs were wasted extremely; the flesh, where it existed, was soft; the superficial veins were prominent; the heat of the skin was of a pungent character; the pulse was at 112, rather strong; the tongue dry; bowels unmoved during the last fortnight; and the general strength of the patient was so reduced that he could not sit up.

Baujoin, though inclined to speak, could not do so without great pain and difficulty, owing to the compression of the vocal organs. He complained of acute pain behind the middle of the sternum. The respiration could be heard in every part of the chest, yet the patient's almost inability to move, his extreme leanness, and the consequent depth of the intercostal spaces, rendered the application of the stethoscope necessarily difficult and incomplete. The respiration was less vesicular in the summit of the left than in the right lung. On feeling the belly, Dr. L. perceived in the right flank a tumor larger than two fists, which he concluded to be the liver, become tuberculous.

On the 29th April, the patient's face was swollen; his cheeks and the tumors of the neck assumed an erysipelatous appearance; his pulse was at 120; the heat was become more pungent, his depression more manifest, and he died the 30th of April, at half past five A.M.

Dr. Lugol opened the body twenty-six hours after death, in the presence of MM. Papavoine, Cuvier, Calvinhac, and Weber.

When the thorax was struck, it was observed to emit a natural sound. The aspect of the tubercles in the neck attracted the notice of Dr. Lugol the moment some of them were laid bare, when he affirmed to the pupils present that they were not of a scrofulous character, as had been believed during the patient's life, but a cancerous growth, perhaps of an unique description, and at least very rarely to be met with in the records of the profession.

As the disease of the cervical, axillary, and inguinal regions was in both sides the same, its appearance on the right side is alone described.

Right cervical region.—Above the centre of the jaw there was a group of tubercles, about the size of a goose's egg, situated beneath the platysma myoides, pushing upwards the tongue and muscles situated above the os hyoides. Beneath these there was a much larger assemblage of tubercles, extending obliquely in the direction of the sterno-cleido-mastoideus to within an inch of the clavicle, and reposing on the side of the pharynx. One of these last was at least as large as a hen's egg, and, with its fellow on

the opposite side, had contracted the diameter of the pharynx. Beneath this second stratum a multitude of small tubercles were perceived, resembling in form and size some kidneybeans, excepting one, which was of the size of a small apricot, and which had been felt during life over the external third of the clavicle. All these collections of tubercles were connected with others which occupied the summit of the thorax, and also with those in the armpit, by small tubercles which accompanied the axillary vessels, &c.

Right axillary region.—In that triangular space underneath the clavicle which is included between the pectoralis minor, humerus, and clavicle, there was a tubercle, the size of a nut, which could be felt through the integuments and pectoral gland. But in the armpit there were twenty, varying from the size of a peachstone to that of a cherrystone, and two others larger than apricots. Behind the upper third of the sternum, in the anterior mediastinum, a few flat and rather small tubercles were found; and others resembling pease were seen attending the internal mammary arteries in their course downwards as far as the xiphoid cartilage.

In the history of the disease, mention has been made of the extreme difficulty which the patient experienced whenever he attempted to swallow. Besides the external pressure occasioned by the tubercles at the side of the neck, the deglutition was likewise impeded by others situated anterior to the spine; but especially by a cancerous enlargement of the tonsils, and by the growth of several tumors of the same nature at the base of the tongue. The compression of the salivary glands, the morbid growth of the tonsils and mucous glands, are to a certain degree sufficient to account for the dryness of the mouth and pharynx, and consequently for the pain occasioned by the deglutition of liquids. As to the pain which, after swallowing, was felt at the upper margin of the sternum, where a sort of bar seemed to impede the passage of the most liquid food, and even of any kind of drink, it might be attributed to the presence of three tubercles which were found encircling the corresponding portion of the œsophagus. A fourth tubercle, larger than these, and of the size of a walnut, was found on the anterior surface of the œsophagus, about an inch above its passage through the diaphragm.

In the groin there were eight large tubercles, situated below the crural arch, resembling in appearance the convolutions of the intestines, and included between Poupart's ligament, the adductors of the thigh, and the external surface of this limb. These tubercles, by means of some as small as pease, formed a communication with others which extended along the iliac artery and vein to the descending aorta. A multitude of them, of a dark red colour, and smaller than kidneybeans, were scattered over the mesentery, mesocolon, omenta, upper and lower margins of the stomach, and over the external and lateral parts of the bladder. In the right flank there was a tumor seven inches long, equally

broad from right to left, and of about the same thickness. This tumor adhered above to the inferior surface of the liver, which it forcibly pushed up towards the diaphragm, the concavity of which it considerably increased; above, towards the right, and below, it adhered to the duodenum, which was stretched and carried forwards by it; on the left side, it was firmly connected by adhesions to the pancreas. The whole circumference of the tumor was composed of small round protuberances, of various sizes, which were originally perhaps so many distinct tubercles. Its colour, inferiorly and towards the right side, was a brown green, which would seem to have depended on the retarded circulation in the white vessels of the cellular membrane and contiguous parts of the peritoneum. On its anterior surface appeared the ductus communis choledocus, sufficiently distended to admit a large probe, and crossing the tumor above and behind in its course from the liver to the duodenum.

After having duly noticed the external circumstances of the tumor, Dr. L. removed it with the liver, which he easily accomplished, since it was not intimately connected with either the right hypochondrium, the spine, the vena cava, or vena porta. This tumor does not appear to have been formed in the liver, as it might have been easily separated from it, if that had been thought desirable. It had no connexions on the right side or behind; on the left, it seemed a continuation of some other tubercles that were situated under the pancreas, which they made to project forwards. Dr. Lugol suggests that this tumor owed its formation to the reunion of small tubercles, similar to those which were found in the mesentery and other folds of the peritoneum; that probably tubercles of the same character appeared along the course of the vena cava, vena porta, and hepatic vessels; and that these tubercles, small at the commencement, and variously separated from each other, had, as they increased in size, become gradually nearer together, until they at length formed the above large tumor.

In order that the interior of the tumor might be examined, Dr. L. made a longitudinal section of it precisely in the direction of its antero-posterior diameter, which measured more than six inches. The surface of this section exhibited various shades of colour, separated by certain lines, by which the boundaries of the original tubercles composing the mass might be traced, and which the lobulated surface of the tumor had already indicated before it was cut through. Amongst these tumors, the two that were situated nearest the liver were remarkable both on account of their size and whiteness, but those at a little distance from it were smaller, and presented various shades of red. At about the point where the middle and inferior thirds of this section met, was a collection of a sanguineous substance, extending more than two inches, and in all respects resembling what is found in the brain of certain individuals who have died of apoplexy.

In the left hypochondrium a large tumor was found, which proved on examination to be the spleen, double its natural size, and quite converted into an encephaloid mass. It was eight inches long, five broad, and a foot in circumference: though it retained somewhat of the original form of the spleen, it preserved no trace of the elementary structure of this organ; it was a mere assemblage of cancerous tubercles, varying in dimensions from the size of a grain of millet to that of a nut, and differing from those of other regions by being of a deeper colour. They were in general united, intermixed, and confluent; but a few appeared to be more isolated, and as it were enveloped in a kind of cellular cyst, upon which some blood-vessels were ramified. These numerous tubercles, by their union, their intermingling, their separation, their various shades of colour, and the interstices by which they were separated from each other, produced the appearance, when divided, of rose-coloured marble, of a very singular and variegated description. This cancer of the spleen was in general of a harder consistence than those of other parts which have been already detailed.

The brain evidently contained too much fluid, blood, and serum. Its texture was also rather soft, but it was in other respects of a natural appearance. The lungs were sound, and crepitated. The heart was rather large, but could hardly be said to be *hypertrophised*. The stomach and intestines evinced various signs of congestion. The liver was pushed a little backwards, smaller than natural, and of a fine red colour, but unchanged in its structure. The kidneys, like the other abdominal viscera, were vascular, but their texture was quite sound. The blood throughout the body appeared to be suffering asphyxia within its various vessels: it abounded in the lungs, liver, kidneys, alimentary canal, and in the brain; but it was every where black, in a fluid state, and without coagula.

Of these tumors, which were all considered during life to be scrofulous, only one contained scrofulous matter in a grumous state. All the rest were cancers, and generally of a round oval shape. They were of various sizes, and for the most part the largest were softer and more coloured than the rest: but to this there were several exceptions. By careful and minute dissection of the tubercles in the axilla, many small vessels were discovered, which could be traced back to the neighbouring arteries. As soon as these minute vessels reached the surface of a tubercle, they were subdivided into others, and spread out upon a sort of cellular texture, which formed its first envelope; then they pierced a second membrane, without subdividing again. This second coat, which was properly speaking the cyst, was somewhat thick, diaphanous, and composed of laminae or plates of a dense texture. These minute vessels, after penetrating to the interior of the tubercle, traversed its entire surface to the very centre; and hence the colour of these tubercles were greater or less in proportion to

the number of capillaries with which they were supplied. In some cysts they were so numerous that they formed as it were vascular tassels, which floated in the midst of the soft substance of the tubercle. In some of these tassels minute coagula of blood were seen, in some instances more dark coloured and recent than in others, and in all cases seeming to arise from rupture of these vessels. In some tubercles there were none of these vascular tassels, but a great number of distinct red filaments extended throughout their substance in every direction.

This substance itself presented several varieties. In some tubercles, in which it was of a white or reddish-white colour, it was analogous in consistence to the white substance of the fetal brain; in others, in which it was of a deeper colour, it resembled in this particular the substance of the corpora striata.

Several of the cysts contained nothing but a sort of pus, which was either perfectly white or as transparent as an opal, and uniformly inodorous; and in those cases in which the capillary vessels penetrated to this soft matter, it was little more than putridness and corruption, resembling in colour the lees of wine.

Such was the general appearance of these cancers. But there were some in which no trace of organization existed, and in which no capillaries could be discovered, neither without nor within: others had vessels externally, which could not be traced to the substance of the cyst; and there were some tubercles whose substance was supplied with blood-vessels, though they could not be distinguished externally.

The rapid progress of this disease was certainly a very prominent feature in its character; for it is not easy to conceive how a morbid production of this nature could be so generally and so completely developed in the short space of four months. Nor is it, perhaps, less astonishing that this patient, whilst in this deplorable state, should be able to continue at work during three months, up to the period of his inability to swallow food.

The anatomical details of this case are particularly important, inasmuch as they would seem calculated to induce us to consider the nutrition of cancer to be referrible to the general laws of nutrition; and they would thus consequently tend to subvert the present prevailing opinions respecting the etiology of this disease.

According to these opinions, the structure of cancer is produced and developed by irritation, which in the first instance forms a deposit of coagulable matter. The hardening of this matter is named scirrhus; its softening, cancer, medullary sarcoma, fungus hæmatodes, accordingly as this softening is differently modified. No vessels whatever are considered to belong to the cancer, but it is said to

develop itself by the juxtaposition of successive layers of this coagulable matter.

On considering this theory merely in a speculative point of view, it would be allowable to request to see this coagulable matter; to be taught the laws by which it becomes first scirrhus, and then cancer; and the source of this irritation, which is the necessary cause of every stage of the disease.

In the history of the above case, which is composed of several hundred cancers, it is manifest that they have a generic form, are furnished with cysts, on the exterior and in the interior of which small blood-vessels are abundantly distributed; so that the mode in which these cancers were nourished is evident to the senses, and clearly referrible to the commonly received laws of nutrition.

Another phenomenon, the sanguineous collection which was found in the encephaloid tumor of the abdomen, is a proof that this tumor was furnished with absorbents; since the half of this sanguineous collection contained merely the fibrine of the blood; and there is no difficulty in admitting the gradual and complete absorption of extravasated blood, as sometimes occurs in recovery from apoplexy.

Thus, then, these cancers had a form, capillary blood-vessels, white vessels (as was evinced by the action of absorption), and nerves (whose existence was demonstrated by the presence of pain); they possessed all the means of nutrition in common with other organs, and like them were endowed with an original modification, within the limits of which their development was confined.

After obtaining these anatomical data, it is still more difficult to comprehend the method which these cancers adopted in their development, in order to become first scirrhus and afterwards soft. It cannot be explained by supposing that the scirrhus condition resulted from the absorption of the fluid parts; for in that case each cancer would have diminished in size proportionably as it became harder; which is contrary to experience, since in general a scirrhus becomes at the same time harder and more voluminous, owing to some peculiar mode of nutrition inherent in itself.

M. Lugol combats the opinion of those who consider cancer not a disease *sui generis*, but only an effect of inflammation; and he thinks this view of the subject both unfounded and unsatisfactory. For by this hypothesis the difficulty is only apparently, and not really removed; since it would be still necessary to explain why inflammation is

sometimes, but not usually, terminated by cancer. Besides, if cancer had an inflammatory origin, it would be cured, as most phlegmasiæ are, by an antiphlogistic treatment. If it were a local disease, the removal of the affected part, when practicable, would be an infallible remedy; and yet so many operations, when adopted for this purpose, under the most favorable circumstances, have been generally followed by such melancholy results, that the most distinguished members of the profession are henceforth ready to relinquish the attempt to exterminate cancer by the knife.

FUNGUS OF THE EYE.

Case of Fungus of the Globe of the Eye. By W. TWINING, Esq.

THE following case of tumor growing from the globe of the eye, which came under my care, when acting as oculist during Mr. Egerton's absence last year, may be worthy of record, as an example that some tumors of very formidable appearance, and productive of severe pain, have nothing in their nature which is malignant, or likely to communicate disease to the contiguous parts; and that such diseases may be extirpated with success.

A healthy, but rather slight-made Hindoo, about fifty years of age, applied at the EYE INFIRMARY, Calcutta, February 17, 1826, having a fungus that protruded from between the right eyelids, larger than an egg: it was of a red colour, hard, and its surface irregular or granular, like a firm cauliflower, and, when handled or pressed, there was little bleeding, but always a puriform discharge.

The tumor appeared to grow from the whole of the eyeball: it was moveable, and its base was firmly girt by the eyelids, but not attached to them; in fact, there was no very strong attachment apparent, except at the lachrymal gland. It filled the whole front of the orbit, and, protruding as above stated, was not only a hideous deformity, but was productive of severe pain in the orbit and head. The weight and pressure of the protruded portion of the tumor which rested on the cheek, had there caused ulceration of the skin. The disease had been fourteen months in arriving at this state, and was preceded by inflammation, which the man said arose from a particle of straw blown into his eye by the wind.

On the 5th March, I extirpated the disease with a common scalpel. The base of the tumor was so firmly girt by the aperture of the eyelids, that an incision was first requisite from the outer corner of the eye towards the temple, so as to give more room for the operation, which was then accomplished in less than a minute by a few strokes of the knife. Two arteries bled freely, and were secured by ligatures. A piece of lint was placed over the closed lids, and over that a sponge retained by a bandage.

There was no unfavorable symptom afterwards, and the man was discharged cured at the end of the month. This man presented himself at the Eye Infirmary a few days ago, (February 1827,) remaining quite well; and there does not appear any tendency to a return of the disease.

After the operation, on making an incision across the tumor, it was found of a firm granular texture throughout; and in its centre the remains of the eye were very evident. The whole globe of the eye, with a portion of the optic nerve, were removed; as may be seen on inspecting the preparation, which is now at the Eye Infirmary.

On maceration in spirit, the tumor became of a white colour, and shrunk to about half its original size; but still the shape of the eyeball is distinctly marked by the pigment of the choroid.

CRITICAL ANALYSES.

*Quæ laudanda forent, et quæ culpanda, vicissim
fissa, prins, cretâ; mox hæc, carbone, notamus.—PERSIUS.*

A Treatise on the Nature and Cure of Intestinal Worms of the Human Body: arranged according to the Classification of RUDOLPHI and BREMSER, and containing the most approved Methods of Treatment, as practised in this Country and on the Continent. By WILLIAM RHIND, Surgeon, Member of the Royal Medical Society of Edinburgh. Illustrated by six Plates, —8vo. pp. 152. London: S. Highley, 1829.

WHOEVER has had opportunities of becoming acquainted with popular, and perhaps even professional, prejudices respecting the cause of various ailments, especially of children, must, we apprehend, be convinced that the presence of worms in the alimentary canal is not unfrequently presumed upon very slender grounds. If, in infants of a very tender age, obscure symptoms of general disturbance arise, they are commonly attributed to teething. At a more advanced period, when obscurity hangs over the complaint, "worms" are a convenient resource when no other explanation can be offered, and many a hapless child is drugged for months to remove a cause which in reality does not exist. In making this observation, we would not have it inferred that we are unconscious of the many and severe ailments that arise from the existence of these troublesome parasites. We would wish to invite a stricter attention to the subject, by which the practical errors which we have hinted at may at least be rendered less common, if they cannot be entirely removed.

In this country the subject of intestinal worms has been much neglected. Dr. HOOPER published, in the year 1799,* an interesting paper on the five species of worms which are found within the intestinal canal of the human body. He confines himself, however, entirely to a description of the external appearance and anatomical structure of these, without giving any information regarding their history, symptoms, and method of cure, or at all mentioning the different species of worms which inhabit the other cavities and textures of the body. Dr. T. BRADLY has added but little to the subject. Dr. CHAMBERLAIN wrote expressly for the purpose of recommending a particular medicine for the cure of *tænia*, &c. in the *Stizolobium*, or cowhage, and does not enter upon a general description of worms. Possessing, then, hitherto, such meagre and unsatisfactory information upon the subject, it appeared to the author of this Essay that a work on the nature and treatment of intestinal worms was yet a desideratum in this country, and to supply this want the present Treatise has been attempted.

Mr. RHIND has adhered to the classification and specific descriptions of RUDOLPHI, and from the work of Dr. BREMSER he has culled much useful and appropriate information. He is also occasionally indebted to Dr. HOOPER for his anatomical descriptions. The most approved practice of this country is given, together with a view of the mode of cure adopted by Bremser. The drawings have been executed by Captain T. BROWN, F.R.S.E., whose knowledge of natural history is said to enable him to delineate the different objects with more fidelity than could be expected from a mere copyist.

Of the formation of worms in the intestines.—Such is the disposition in nature for the support of animal existence, under every variety of circumstance, and in every possible situation, that all animals, even down to very minute species, have other animals, still smaller, which inhabit their bodies, and derive their nourishment, and live, and propagate their species, in their various textures.

“Of these parasitical animals which are found among the various classes of the animal kingdom, Rudolphi enumerates 1100 different species. Some of these worms are common to several classes of animals, but others again are peculiar to and only found in one particular species.

“The *Ascaris lumbricoides*, or large round worm of the human

* Memoirs of the London Medical Society, vol. v.

species, is to be met with also among pigs, horses, and cows; whereas the two species of tapeworm found in the human body are distinct from those of all other animals.*

"Every different structure and cavity of animal bodies will be found liable to be tenanted by these animals; and, for the most part, to be exclusively inhabited by a particular species. There have been worms found in the brain, in the lungs, in the liver, the biliary ducts, and even in the heart itself; and Hopkinson and Morgan discovered a species of worm (the *Filaria papillosa*) in the anterior chamber of a horse's eye. We find, also, in the tenth volume of the Transactions of the Royal Society, another worm, which is described by Captain Brown as a new species, the *Ascaris pellucidus*, which also inhabits the eyes of horses in India, and may be seen swimming about in the aqueous humor with great activity.

"It sometimes happens that the eggs and larvæ of various insects get introduced into the body, and are there developed; but these are not to be confounded with the animals which are peculiar to, and exist and propagate their species in, the cavities of the human body. It is of these latter that a particular description is proposed to be given in the following pages.

"That the intestinal worms of the human body are of a peculiar kind, and different from any which are found to exist in the earth or water, is sufficiently evident from their distinct and peculiar formation, from their living and propagating their species in the body, and from their incapability of sustaining life for any length of time if removed out of it. These worms, when exposed to cold air or water, very quickly die; whereas, had they previously existed in the earth or water, the change could not have so completely affected them.

"If they were not distinct worms, but come from without, why not also inhabit the same parts of the body promiscuously? Whereas it will be found that some of the species live in the small intestines, and others, again, always in the large." (P. 13.)

Supposing it to be true that the intestinal worms of the human body are different in appearance from any which are found to exist in the earth or water, it does not follow they are "of a peculiar kind." For it is well known that considerable alteration of structure will result from change of food and habitation, in worms or the larvæ of insects introduced into the human intestines from without. A difference of food, for instance, alone produces a growth and development of sexual organs in the honey bee, and converts what have hitherto been called neuters, but which are really imperfect females, into queens, or bearing bees.† It

* Bremser.

† Good's Study of Medicine, vol. i. p. 309.

may be also true that worms which have been long resident in the intestines, "when exposed to cold air or water, very quickly die," and still they may have previously existed in the earth or water. Such a change may have occurred in the constitution of these animals, from the circumstances just referred to, that they are no longer capable of bearing the effects of those external agents, amidst which they were by nature destined to live. But, in fact, Linnæus himself pointed out that the *Tænia solium* exists, though much smaller, in muddy springs. Menander also, cited by Rosen, Unzer, and Tissot, declares that he has found in water the same species of worms that inhabit the human body!* Dr. Bremser is of opinion that the origin of worms in every body is at first by a *primitive* or *spontaneous formation*; the *bildungstrieb* of many German physiologists. This hypothesis is opposed by Mr. Rhind, and we think upon very solid grounds. Such a doctrine is unsupported by a single fact. It is contrary to all analogy drawn from the animal kingdom: for in no other class of animals is there an instance of spontaneous formation.† We believe it is generally admitted that "a certain state of the system and bowels is necessary to favor the production of intestinal worms, and that a healthy state of the bowels is sufficient to resist them, even should they be introduced either alive or in the state of eggs." Pallas has demonstrated by experiment that worms may be propagated by the injection of their eggs into the body.

"By a small incision, he introduced into the abdominal cavity of a dog the eggs of a *tænia* from another dog; and, after the expiration of a month, he found young *tæniæ* in the cavity. In this case, not being within the intestine, they were not liable to be expelled by the healthy action of the bowels; and the natural warmth and moisture of the abdomen favored their production." (P. 22.)

In many cases it may doubtless be very difficult to determine in what manner worms are produced in the intestines or other parts of the animal body. Upon this subject Mr. Rhind offers several suggestions, which are very similar to the opinions given by Good in his *Study of Medicine* (vol. i. p. 306.) Without having recourse to the doctrine of *equivocal generation*, it must be presumed that the origin of

* Dict. des Sciences Med. tome 57, p. 213.

† It was originally supposed by Aristotle that, during the process of putrefaction in animal fluids, worms were spontaneously formed. This opinion has been maintained by some modern authors, amongst others Needham, who was ridiculed by Voltaire for having asserted that eels were created in mutton gravy!—REV.

worms is *ab externo*. As a proof of the extrinsic origin of the *Ascarides vermiculares*, we may mention the following fact recorded by Dr. T. M. Barry:* “In the year 1797, a family residing near the town of Macramp, in Ireland, suffered severely from this species of worm; and, upon examination, it was found that a spring, from which they constantly drank, was infested with worms which corresponded in appearance with the ascarides.”

The opinions of the author as to the causes of the formation of worms are in unison with those commonly maintained. A general laxity and debility of the whole system, but more especially a feebleness of the intestines, is the disposition of body which is most prone to worm affections.

“A want of due harmony, too, between the several parts of the alimentary system, an imperfect digestion of the food, and a deficiency of the various juices necessary for converting this food into nourishment, or an overactive digestion, producing more alimentary matter than the absorbent vessels can take up, are both equally favorable to the production of worms.

“When the nutritious matter taken into the stomach is imperfectly digested,—when there is a deficiency of the necessary fluids for this important purpose,—and more especially when there exist a feebleness and torpidity of the stomach and alimentary canal, the imperfectly digested chyle accumulates in the bowels, passes into a state of fermentation, gives rise to an undue quantity of mucous matter, and affords a favorable opportunity for the development of the various worms which feed on the chyle, and find an easy lodgment in the bowels, from their impaired action and diminished peristaltic power. On the other hand, when the digestive powers are over vigorous, when a greater quantity of nutritious matter is prepared by the active state of the stomach than the absorbent vessels of the system can take up, this alimentary matter accumulates on the internal coats of the intestines, and thus becomes favorable for the production of worms. It is from this cause that we occasionally find robust and healthy people affected with this disease: and this constitutional temperament, or predisposition to this disease, may be often transmitted from one person to his descendants; thus exemplifying the hereditary tendency to worms which writers have remarked.” (P. 27.)

It is well known that certain kinds of diet have an effect in predisposing the body to worm diseases; such as crude raw vegetables, unripe fruits, various sweetmeats, &c. Salt, from its stimulating qualities, is known to be a preventive of worms. Lord Somerville, in his address to the Board of Agriculture, relates the following circumstance:

* Transactions of the Royal Irish College, vol. ii.

"The ancient laws of Holland ordained men to be kept on bread alone, *unmixed with salt*, as the severest punishment that could be inflicted upon them in their moist climate. The effect was horrible: these wretched criminals are said to have been devoured by worms engendered in their own stomachs." Salt, too, when given to graminivorous animals, besides its other beneficial effects as a stimulant, is of advantage in causing the destruction of the various intestinal worms to which this class of animals are liable. For this purpose it has also been used as a remedy for sheep with diseased livers; which disease is frequently caused by the lodgment of a peculiar worm in that viscus." (P. 33.)

Spirit drinkers have been found less liable to worms. They have been expelled from the intestines by using alcoholic liquors as a remedy.

Mr. Rhind gives a very accurate anatomical description of the various species of worms that infest the human body. For this part of the subject we must refer our readers to the work itself. An abstract from it would be but of little service without the plates, which illustrate the peculiar formation of each kind of worm.

Symptoms attending the presence of worms:

"The appearance of the countenance is changed, it is generally very pale or of a leaden colour, with a red circumscribed spot in one or both cheeks. The eyes lose their brilliancy, the pupil is enlarged, and a blue rim is perceivable round the under eyelid. The nose is swelled, and very generally the upper lip is somewhat tumified, and there is a continual itching and irritation in both these. Sometimes, too, there is a bleeding from the nose. There is also headach, throbbing in the ears, a foul tongue, more saliva than natural in the mouth, and the breath is very fetid, especially in the morning. The appetite is variable: sometimes it is quite gone, and at other times it is voracious, with a continual gnawing sensation at the stomach. There is also nausea, and a desire to vomit: when this takes place, the fluid ejected is limpid like water. There are often violent gripings, and these are principally felt about the umbilical region. The alvine excretions are glairy, and sometimes tinged with blood. The urine is turbid, and, after it has deposited a sediment, it has the appearance of milk-and-water. The belly, too, is hard, and has a feel like a drum. There is a general emaciation of the body; the sleep is troubled, accompanied by grinding of the teeth. The patient is generally lazy and indolent; sometimes in good and sometimes in irritable temper. Blindness, deafness, delirium, even apoplectic and epileptic fits, have been known to have their origin from worms. The last and most decisive symptom observed is, that in the matter vomited, but more generally in the alvine excretions, entire worms or portions of them are perceived.

"It must be remarked, that all the above symptoms are not always found in the same individual; nor do any of them, except the last, exclusively indicate the presence of worms. One or more of these symptoms may be indications of the existence of several other diseases, as water of the head and some others; but when these symptoms occur, and cannot be attributed to any other cause, the strong presumption is that this cause is worms. At the same time it may be mentioned, that worms sometimes exist, and that in considerable quantities, without causing any inconvenience or any bad symptoms whatever." (P. 105.)

It must not be too hastily concluded, because worms, or portions of worms, are voided during the existence of disease, that the malady has been caused by their presence. They may have previously existed in the intestines, and, from the altered state of the body, or the effect of medicines, may have been expelled.

"It is in this way that the notion of worm epidemics and fevers must have originated. Fever, when it seizes a patient, generally proves the death of the worms contained in the body: and this circumstance occurring in those in whom worms had previously existed, had very naturally given rise to the erroneous conclusion that these worms were the cause, and not the effect, of the fever." (P. 108.)

Much difference of opinion has existed as to the fact whether worms perforate the coats of the stomach and intestines. Rudolphi and Bremser are of opinion that they do not. There are many cases on record, however, which prove the contrary.*

We now come to the most interesting, but unfortunately, in the present state of our knowledge, not the most satisfactory, part of the subject, *the method of cure*.

Our object is twofold: first, to destroy and expel the worms; second, to correct that particular state of the general system, and especially the intestinal canal, which has been the cause of their formation. The author is of opinion that those medicines which are given with a view of destroying intestinal worms by their mechanical action, are of very doubtful operation, and in all probability owe the whole of their good effects to the powerful purgatives with which they are either conjoined or immediately followed.

"Even the cowhage (*Stizolobium*), a remedy so much recommended by Chamberlaine, and which for a considerable time was in much vogue for the cure of *tænia*, though calculated to act as

* Cases in which *Lumbrici* were evacuated by Ulceration through the Parietes of the Abdomen. By W. YOUNG, M.D. (*Glasgow Med. Journal*, Nov. 1828.)—REV.

the most powerful mechanical agent, from the peculiarly sharp, penetrating, and minute spiculi of which the down of the pods is composed, has never been found effectual, unless purgatives are used at the same time." (P. 113.)

Of the cure of the maw, or threadworm, (*Oxyuris vermicularis*,) and long threadworm, (*Trichocephalus dispar*.)—These two species are found in the large intestines, or lowest part of the intestinal canal. Sometimes they cause little or no inconvenience. More frequently they produce great irritation, heat and pain about the anus, especially after exercise. They are most common in children; and sometimes cause convulsions.

"Those medicines given by the mouth, with a view to their destruction, generally, in the course of the long passage through the intestines, lose their peculiar virtues, and become of little use: injections, therefore, are most to be depended on. Aloes, however, are known to have the property of acting particularly on the rectum and cæcum, and of passing through the other small intestines little changed: from two, three, to six grains of aloes, given in a pill or powder every morning, often destroys these worms in considerable numbers."* (P. 115.)

Dr. Bremser's mode of cure consists in the exhibition of purgatives and bitters. The formulæ of his prescriptions are given. Dr. B. has found the irritation relieved, and the worms destroyed, by an injection of any of the common oils. In obstinate cases he advises the fumes of tobacco, or an enema of the infusion of the male fern.

"As these worms most commonly affect young children, it is of great consequence to have the medicines exhibited in as small bulk as possible. The following can be given disguised in a little jelly, &c. R. Pulv. Aloes, gr. xvi.; Pulv. Scammonia gr. viij.; Sacch. Alb. ʒi. Misce. To be divided into four or eight powders, according to the age of the child; one powder every morning.

"The following injection is then to be given: R. Ol. Terebinth. ʒij.; Ol. Olivar. ʒij. Misce, pro enema. Or, R. Pulv. Aloes ʒss. To be dissolved in a little milk or gruel for an injection.

"The quantities in both the above to be doubled, if necessary, according to age, &c.

"The infusion of tobacco, also, in the proportion of ʒi. of the leaves to 1lb. boiling water, letting it stand ten minutes, is also a powerful enema." (P. 117.)

* It is well known that worms are very partial to milk. And for the purpose of effecting the expulsion of those species which inhabit the rectum, it has been proposed to place the patient in a hipbath of milk, by which they may be allured from their abode. This plan has sometimes succeeded even in cases of tænia. (Dict. des Sc. Med. tome 57, p. 199.)—REV.

Sometimes these worms escape from the anus, and creep into the vagina, causing great irritation. Injections of equal parts of cold water and vinegar, repeated frequently, will be found to destroy them.

Of the cure of the long round worm (*Ascaris lumbricoides*).—These worms are found in the small intestines, and feed on the pure chyle. They sometimes exist in adults.

“These worms are generally easily expelled; but, to ensure this completely, as also the destruction of their eggs, it is proper to persevere with the vermifuge medicines for some considerable time, and to keep up a continued action in the intestinal canal. A combination of medicines, too, which act on every part of the alimentary canal in succession, will be found the most complete and efficacious” (P. 120.)

Purgatives, succeeded by tonics, are required. To prevent future attacks, the diet and state of the digestive system must be strictly attended to.

Of the cure of the *Bothriocephalus* and *Tænia*, or tapeworm.—To dislodge these worms is a task of great difficulty. They frequently cause considerable mischief. Dr. Bremser tells us that he has treated more than 500 persons of different ages, affected with tapeworm, with uniform success. None of his patients, after going through the proper course of medicines, having had occasion to apply to him again. He commences by giving the same electuary he recommends for the other species, for several mornings in succession. We subjoin the formula:

“R. Sem. Cinæ Tanacet. Rud. Contus. ʒss.; Pulv. Valerian. ʒij.; Pulv. Jalapæ ziss. ʒij.; Sulph. Sodæ. ziss. ʒij.; Oxy mel Scillæ q. s. ut ft. electuarius. Dose, two or three teaspoonsful in a morning.”

After some time he gives the empyreumatic oil of Chabert, which is composed of one part of empyreumatic animal oil, and three parts of oil of turpentine. The dose is two teaspoonsful in a little water, morning and evening: it may be increased or diminished according to its effects. “If this medicine should affect the bladder, an emulsion of oil, mucilage, or other bland liquid, is to be taken frequently, to correct the disagreeable symptoms.” Having persevered in this course for ten or twelve days, purgatives are to be exhibited. Jalap, senna, and soda, are recommended in combination. Four or five ounces of the oil are generally sufficient to effect a cure; or, in obstinate cases, six or seven ounces. The medicine must be continued some time

to ensure the complete eradication, not only of the worms, but of their eggs. If there is a disposition to form glairy matter in the intestines, a tonic medicine is given, consisting of compound tincture of aloes, tincture of muriate of iron, and elixir of vitriol. Dr. B. is aware that this prescription is unchemical: experience, however, has proved its efficacy. He restricts the patients to no particular regimen, except forbidding them the use of dry leguminous substances, too much farinaceous diet, and all substances of an oily and fatty nature. He considers the empyreumatic oil of Chabert an effectual cure for worms, especially tænia; so much so as to supersede the use of all other remedies. Rudolphi also bears testimony to its success. As it is apt to produce nausea, griping, and strangury, the dose should be small at first, and gradually increased.

Mr. Rhind thinks, and we believe correctly, that the oil of turpentine is the active ingredient in this medicine.

“The oil of turpentine, when taken alone, is very apt to pass off by the urinary vessels, and to affect the neck of the bladder, thereby causing great irritation, and often strangury. By being conjoined with the castor oil, it more readily passes off by the bowels; and, exhibited in this manner, is a sure and efficacious remedy against the most obstinate cases of tænia, and may also be given for the expulsion of the round worm and small threadworm: for the latter, either by the mouth or, what is far better, in the form of an enema. During the exhibition of the medicine, the patient should drink copiously of bland broths, such as beef-tea, &c.; and, if there is any irritation in the bladder, the free use of an infusion of linseed will be found to allay the uneasiness and pain. Some patients cannot bear more than from twenty to thirty drops of the oil of turpentine, while others can take one to two drachms with impunity: the dose, therefore, should be cautiously regulated at first, so as not to frighten or disgust the patient.” (P. 129.)

When all traces of the worms have disappeared, we must endeavour to prevent their future formation, by attending to the second indication, that of strengthening the system, and the bowels in particular, by tonic remedies, such as the sulphate of quinine or carbonate of iron.

Of the larvæ of insects and other animals found in the human stomach and intestines.—The larvæ of the various species of insects, as well as other worms and reptiles, often find their way into the human body, and are afterwards voided by the mouth or per anum, in a living or perfect state. Mr. Rhind observes, that these animals apparently have access to air in the stomach and intestines; for many

species are voided alive, to whose existence respiration in some form is absolutely necessary.

In the fourth volume of the Transactions of the King and Queen's College in Ireland, a singular case is recorded by Dr. PICKELLS, of a young woman who discharged, at different times, an immense quantity of insects from her stomach, chiefly of the beetle tribe. The author has repeatedly seen the larvæ of the various species of moths, of the common flesh-fly, &c. voided from the bowels.

The following case was communicated to Mr. Rhind by Mr. A. ANDERSON, surgeon, Haddington.

"Robert Dixon, farm servant, Markle, Haddingtonshire, was, in the summer of 1826, engaged in driving lime to the fields, and was in the habit of frequently drinking from the ditches on the roadside. In the end of the same year his disorder commenced with an increased desire for food, a vomiting up of fetid slimy matter from his stomach, which made him cough, and with which he was attacked two or three times a day: nearly half a pint would come up at a time, accompanied with sour belchings and eructations, and a most obstinate state of bowels, five or six days sometimes intervening without a stool. He felt a swelling and fulness of the right superior portion of the stomach, which was very painful when pressed. Slept very well, except on his right side; for, when he attempted to lie on it, an almost continued working up of the slimy matter took place, which made him sit up, and brought on cough.

"He continued in this state till June 1828, using a variety of medicines, and undergoing a variety of medical treatment, without any relief.

"On the 17th June, Mr. Anderson was consulted, and ordered him a strong solution of carbonate of soda, and pills of calomel, hyoscyamus, and extract of gentian. On the second day after the exhibition of these medicines, in one of his severe fits of vomiting, he ejected from the stomach an animal of about four inches in length, which proved to be the common species of gray snail, (the *Limax major*.) It was quite lively and vigorous when voided, and lived in Mr. Anderson's possession for five days afterwards. After this the patient's distressing symptoms of vomiting, &c. disappeared, and he is now (10th October) about to resume his usual occupation." (P. 140.)

It would be but an equivocal compliment to say that Mr. Rhind's treatise contains more information than any previous work upon intestinal worms, after having stated that hitherto this subject has been much neglected in this country. The practical inquirer will find in this essay a satisfactory account of all that is known upon the subject.

Notwithstanding the confidence with which Dr. Bremser

speaks of the efficacy of the treatment he adopts, we fear that Dr. Mason Good's observation will still apply, "that a decisive vermifuge process is yet a desideratum in medical practice;" such, at least, is the result from our own experience, and our practice has not materially differed from that of Dr. Bremser, unless, indeed, the "huile empyreumatique" of Chabert possesses greater anthelmintic powers than the oil of turpentine, which we do not presume to be the case.

A Letter addressed to his Excellency the Right Honourable General the Earl of Chatham, K.G. Governor of Gibraltar, &c. &c. &c. relative to the Febrile Distempers of that Garrison. By W. W. FRASER, Esq. Inspector of Hospitals, and Medical Superintendent of Quarantine at Gibraltar.—8vo. pp. 49. Callow and Wilson, 1826.

WHEN every arrival brings accounts of the progress and increasing mortality of the fever at Gibraltar,* and when we recollect the great loss of life formerly occasioned there by, it is presumed, similar fevers, coupled with the difference of opinion which then existed, regarding its nature and treatment, we are led to look into the accounts of former periods, that we may form some general opinion as to the probable extension and results of the present visitation. For this purpose, we reasonably expected precise and satisfactory information from the last publication on the subject, a pamphlet by Mr. FRASER, considering the peculiar advantages enjoyed by that gentleman, for obtaining the best means of judging fully and accurately. In this expectation, however, we may as well state at the outset, we have been disappointed. Mr. FRASER, it appears, has long resided at Gibraltar, and was, for years, at the head of the medical staff, and medical superintendent of quarantine there.

The publication in question is in the form of a letter to the governor of the garrison; but is clear that some further object was contemplated, and that it was likewise meant to communicate knowledge to the professional reader, else it should not have been encumbered with doctrines and directions which could not interest the governor, and will not, we fear, instruct those who are eager for knowledge on this interesting subject. The letter to the governor will not, we are sorry to say, dispel the darkness

* More favorable accounts have happily been received since this article was written.—EDITORS.

which rested on the subject, nor settle the disputes which have arisen regarding it. It is almost in every way unsatisfactory: obscure in manner, confused in statement; verbose and affected in style, while pretending to be terse and epigrammatic; there is, indeed, little to defray the trouble of reviewing it; and, were it not for the present condition of Gibraltar, and some dangerous dogmas which it contains, we should certainly have never written a line regarding it.

In a pamphlet of forty-nine duodecimo pages, Mr. FRASER has given us opinions in a great variety of important subjects, but in a manner which renders it impossible to follow him; without writing at much greater length than he has thought proper to do; his notions are given not only without order, but in such total defiance of order, that it would be an easier matter to render an intelligible account of Good's Study of Medicine than of this tiny production. We shall, therefore, for our own satisfaction, and the reader's ease, glance at the principal points named, not fully stated, much less argued, in the following order: first, the origin of the disease; second, its nature; third, its treatment.

With regard to the first point, it is difficult to ascertain Mr. FRASER's opinion, from the strangeness of some of the terms which he employs, and the confusion into which he has contrived to throw those in general and well-defined use. Thus he appears, at one time, to employ the words infection and contagion as convertible terms; and, at another, to apply them in the sense for which they are at present generally used, respectively. Then we are told of "epidemic influence," and "epidemic constitution," as explanatory of all difficulties; again, we are informed that "it is obviously infectious." From these and similar modes of expression, so palpably obscure, it is impossible to say what Mr. FRASER's notions on the subject of contagion certainly are; whether he regards it as an inherent and essential quality of the disease, and therefore capable of distant transportation, or as an accidental adjunct acquired during the progress of the disease. But, from the general tenor of the pamphlet, the bustle about seclusion and quarantine, the faith with which he seems to repose on the doctrines of his friend Mr. Pym, and the danger which would be incurred by the importation of typhus, put forth as a parallel case, we are led to infer that the former is his opinion. Now we do not intend to enter on the question of the origin of the fever in 1813, because we have neither time nor space for such an inquiry, and because, after all that

has been written on the subject, what we could say might not be received with much patience or good will ; but we confidently refer to the writings of Dr. Burnett, for clear and, as it appears to us, conclusive facts and arguments against the belief that it was then a disease foreign to the soil of Gibraltar. It has been objected that Dr. Burnett had not such ample means of forming correct opinions on the subject, as those gentlemen who had been long resident on the rock of Gibraltar. We are aware of the importance of extended opportunities of judging, and allow them their full weight ; but we would hint to the objectors, that opportunities are not always properly cultivated, that experience and observation are not always the same thing, that moral vision is not equally clear in all persons, and that one man can see at a glance what another shall not perceive during a long life. We will only add, our firm conviction, founded on no trivial grounds, that such fevers are always the offspring of the earth, or its inorganic tenants, on which they appear ; and that they are no more capable of being carried from Bulam to the West Indies, and thence to Gibraltar, than they are to be transported from the last place to Greenland. It is not a little curious and mortifying to observe, in proof of the power which prejudice and partisanship possess to pervert reason and warp judgment, that while such labour and pains are taken to trace the epidemic fevers of Gibraltar to a foreign source, no difficulty is found in accounting for the arrest of contagion on the neutral ground. How can it be reconciled with the most simple proofs of reasoning, nay with the plainest dictates of common sense, that the germ of a disease which could be carried 4000 miles to Gibraltar, could render the place desolate in a few weeks, and while the inhabitants within the walls were yet falling its victims in great numbers daily, when the garrison must, in fact, have been a vast magazine of contagious material ; if contagion was the cause of the mortality, how, in the name of common sense, could such things happen, and the disease during the whole period never reach the neutral ground ?

While multitudes were perishing within the walls, their friends, the inmates of the same sheds, and the partners of the same beds, were removed to the neutral ground, yet they did not carry the disease with them, or, if they did, had not the power of communicating it to any one there ; nay, patients were carried from the town to the neutral ground labouring under black vomit, and in the act of dying, yet the disease was not propagated. How can such

things be, if the fever is endowed with contagious properties? Surely such plain, prominent, incontrovertible facts ought to open the eyes of every man who is not determined to keep them shut; and, to remove every reasonable apprehension regarding the importation of this disease, we are persuaded that the medical superintendent of quarantine, and similar functionaries at Gibraltar, will do wisely to look closely at home for the cause of their epidemic fevers, instead of turning their eyes and inquiries to Siam, Bulam, or Havanna; that they should throw off their fears of foreign invasion, and try to defend themselves against a climatic enemy; and that, if they seek carefully and skilfully, they will find within their own walls, and in their own houses, abundant cause for all their suffering from epidemic fever.

Secondly. Of the nature of this fever we shall only say a very few words, as we hold opinions on the subject, in some measure peculiar, and as this is not the place, if there were opportunity, to set them forth; but we think it right to state why we cannot agree with Mr. Fraser in one or two particulars.

Respecting the often agitated question of second attack, Mr. Fraser agrees with Mr. Pym, who gave himself much trouble to secure to himself the honour of discovering what does not exist. That those who have once had the fever in question, the Bulam of Pym, the epidemic fever of Mr. Fraser, (a good latetudinarian name, by the by,) are not very susceptible of the disease, for a considerable time at least, we believe, and indeed have the means of knowing; but that one attack constitutes any thing like perfect immunity from another, it is now too late to maintain. For proofs on this point, it is enough to refer to Dr. Burnett's work on Mediterranean Fever, as far as Gibraltar is concerned; and, if the epidemic fevers there be of the same nature as the concentrated fever of the West Indies, a cloud of witnesses have testified, and many more are ready to testify, that no such absolute immunity is known to them. As this is simply a question of fact, it must be decided, as in other cases of evidence, by the number and credibility of the witnesses; and, as the case has already been heard and decided, the number, on the one side, being large, clear, and consistent, and, on the other, few, confused, and equivocating, we may dismiss it at once, and for ever.

Mr. Fraser says, in pointing out the difference between what he calls the endemic and epidemic fevers of

Gibraltar, the bilious remittent and Bulam of Mr. Pym, that, in the former, there is little delirium. We are not prepared to question the accuracy of this assertion, as applied to Gibraltar; but, if it is meant of remittent fever generally, there can be no difficulty in pronouncing it incorrect. Among other records, let Mr. Fraser read Dr. Johnson's *Work on Tropical Diseases*, and he will find that fierce delirium is a common symptom of what is usually called bilious remittent fever. If this be the case in remittent fever elsewhere, and every body acquainted with the disease knows that it is the case, it may be so on some occasions at Gibraltar, and what then becomes of the diagnostic?

Further, in attempting to mark the two forms of fever, Mr. Fraser assures us that the endemic is "never infectious nor contagious," and that the "epidemic is obviously infectious." This reminds us of a notable specimen of induction in the "*Elements of Medical Logic*," amounting to this: The difference between the contagious and noncontagious fevers of the West Indies is to be known, among other things, by the fact one is contagious and the other not contagious. When men propose to teach us, we reasonably look for something by which we may be made wiser, and we are simple enough to think that we acquire little knowledge by being told that a thing is so because it is so, whether the information be communicated by the senior physician to the king, or by the medical superintendent of quarantine at Gibraltar.

Thirdly. On the subject of treatment, Mr. Fraser is singularly meagre, vague, and unsatisfactory. The object of his information, as far as it goes, appears to be chiefly to guard against bloodletting. Thus, at page 32, we are told: "I stated that, in certain cases of little danger, the lancet might be used among the robust and sanguineous, especially during warm weather; but, in the majority of cases, and those of real danger, the lancet was perfectly inadmissible." Now this amounts to a virtual prohibition of bloodletting as a curative agent; for, if it only *may* be used, it is obvious that it also *may* be omitted, which, indeed, is probable enough in cases of little danger; but we are told that, "in cases of real danger, it is perfectly inadmissible." Prepared as we in some measure were, by the preceding parts of the pamphlet, for strange things, we confess that this declaration startled us; we were not prepared, in 1826, for such a sweeping prohibition of this most valuable remedy. Such positive rules and regulations constitute the besetting sin of medicine, especially as regards

fever. How often, since the days of Sydenham, has bloodletting been every thing or nothing in the treatment? During one lustrum, we are taught that little else is necessary but the abstraction of blood: during another, that to remove blood is to destroy life: and this over and over again, in regular rotation, till the superficial observer is led to believe that the treatment of fever is a mere matter of arbitration, to be determined by the will of him who has sufficient address to lead a party. But the man who looks more deeply, finds that such systems, either of exclusion or inclusion, are radically and ruinously wrong, especially when applied to the use of bloodletting in fever. He knows that, on every occasion of prevailing fever, different cases differ so greatly in character, that not only must different remedies be employed, but that the very principles on which they are employed ought to be different. In one case, of the same epidemic, there will be excitement, in another, depression of animal power; to apply the same remedies, in the same manner, and with the same views, in both cases, would be to run counter to the first principles of reasonable therapeutics, and to do our best to resist the sanatory efforts of nature. In attempting to adjust the various means to the ends proposed, no one is so important as the appropriate employment of bloodletting; and the man who does this, best performs the most important part in the treatment of fever. It is not enough to do this well, without doing other things, but it is assuredly one, and the first, of the essentials. Few dangerous cases of fever occur, we venture to affirm, in which bloodletting, in some stage, and to a certain amount, is not only admissible, but necessary; and the man who discharges his duty best is he who most skilfully employs it, as to time, quantity, and manner. We feel strongly on this subject, and therefore express earnestly our hope that it may be made a matter of graver study than, as appears from the pamphlet before us, it seems in some quarters to be. Such arbitrary and aphoristic directions, as that which we are considering, might be suitable enough in a pamphlet on the management of teeth, but are altogether inconsistent, in their manner at least, with such important subjects as the treatment of fever; and we hope that, if Mr. Fraser should write on the subject, and retain his opinion respecting bloodletting, he will condescend to give us some reason for it.

The principal of Mr. Fraser's ideas on treatment are given in the following words:

"Free and continued purgatives, chiefly calomel, colocynth, and gamboge, a strict antiphlogistic regimen, (generally speaking,) great care being taken not to overcharge the stomach; at the same time, abundance of broths, or diluents, were at command, together with warm baths, general and topical. Wine, soda-water, and porter, were freely used in convalescence. In fine, good nursing, the constant and apt exhibition of all those comforts so generally attainable in British practice, were found essential to the cure; the most expensive wines were occasionally issued, and the caprices of the sick indulged; pure and cool air was indispensable; warm lavations and baths were acceptable, but cold affusion was dangerous, if not mortal, and it was uniformly dreaded by the patients." (P. 31.)

The only remark we shall offer on this paragraph, containing the marrow of Mr. Fraser's therapeutical directions, is to suggest to the author, that it might not be amiss to take another look at Robert Jackson's book on febrile disease.

We can afford to give only one more specimen of Mr. Fraser's manner of instructing the ignorant, with which we shall take leave of these sybilline leaves:

"Cities escape when rigid enforcements seem to ward, and the wisdom of regulations is then lauded; but it has been asked, who, that has considered the illimitable range, the seemingly opposing facts, and the still undiminished mortality of epidemics, would consider himself qualified to decide that any virtual negligence, or any specific act, could deserve a fatal 'ostracism;' or that the voice or exertions of an individual had, in excluding pestilence, ever 'merited a mural crown.'" (P. 14.)

Observations on the Nature and Treatment of Cholera; and on the Pathology of Mucous Membranes. By ALEX. TURNBULL CHRISTIE, M.D. Madras Medical Establishment; and lately in Medical Charge of the Civil Department in the Southern Mahratta Country.—8vo. pp. 137. Edinburgh: Maclachlan and Stewart, 1828.

THE author of this treatise states that he had considerable experience in the treatment of epidemic cholera during the years 1823, 24, 25, and 26, among the military in different parts of Madras, and particularly at Darwar, where even the secluded inmates of the jail were not safe from its fatal influence: and, as he was allowed to inspect the bodies of such of the prisoners as fell victims to the disease, he enjoyed an advantage of which, owing to the religious prejudices of the natives, the medical practitioner in India is generally deprived.

Dr. CHRISTIE does not profess to give a complete history of cholera, but, "by associating the observations of others with his own, he proposes to investigate its pathology, and endeavour to explain its symptoms, and the mode of action of the various remedies which have been employed for its cure."

It appears that the first cases of cholera which the author was enabled to investigate convinced him that the received opinions relating to its pathology were all more or less incorrect, and that the principal seat of the disease was in the whole mucous system; and, with the laudable desire of being better prepared to distinguish the precise effects of cholera on the mucous membranes, he instituted experiments on some of the lower animals; a few of which experiments are prefixed to this work, together with short remarks on the general pathology of mucous membranes. The latter commences thus:

"Inflammation, while it is the most frequent, appears also to be the most simple, morbid condition to which the various textures of the body are liable; and, in almost every texture, disease, however much it may vary in its progress and termination, is, with few exceptions, ushered in by inflammation.

"I will endeavour to show that the mucous system affords a remarkable exception to this general rule; for, in addition to inflammation, it is liable to another simple morbid affection, viz. catarrh, which often occurs alone, without being accompanied or having been preceded by inflammation. I conceive, then, that mucous membranes are liable to two distinct kinds of diseased action, viz. inflammation, evinced by one or more of the following signs, viz. increased heat, pain, redness, and swelling; and catarrh, characterised by the secretion of the membranes being depraved and increased in quantity." (P. 7.)

And,

"It has been stated as a general law, by several eminent authors, that inflammation of mucous membranes is accompanied by increased mucous secretion; and pathologists almost invariably attribute catarrh to an inflammation of the mucous membrane in which it occurs. This, I apprehend, is far from being correct; for are there not numerous examples of inflammation of a mucous membrane without increased secretion, and of catarrh without inflammation? We have examples of the former in ophthalmia, inflammatory sore throat, some cases of gastritis, and perhaps also of enteritis: of the latter, in a few cases of common catarrh, in diarrhoea, and also (as I shall have occasion to show in a future part of this essay) in Indian cholera." (P. 9.)

If we correctly apprehend the author, it appears to us that he here affirms much more than he can prove, or

otherwise he ushers in with great importance as new, what has never been doubted: for surely there is no novelty in the opinion that inflammation is not *always* attended with increased mucous or other secretion, or that increased mucous secretion is not necessarily the effect of inflammation. On the other hand, it is evidently opposed both to reason and to experience to deny that inflammation is compatible with increased secretion; since if, as is generally believed, the matter secreted is in all instances derived from the blood, and if it is also true that inflamed organs contain, *cæteris paribus*, the greatest quantity of blood, then it is rational to conclude that one of the effects of moderate inflammation in mucous membranes would be an augmentation of their secretions; and daily practice tends to confirm us in this belief, since we are constantly meeting with patients who, with all the acknowledged signs of inflammation, have also increased secretion. But it may be asked whether it is logical to allow that to be sometimes an effect of inflammation which is not always so, especially when we admit that the same effect may arise from a different cause? We reply, that this is not more extraordinary than the acknowledged tendency of excessive inflammation of muscular parts to prevent the union of wounds, although that union is effected by what is called adhesive inflammation. That one degree of inflammation should diminish secretion, while another increases it, is, in fact, not more wonderful than that sleep should be promoted by one degree of fatigue, but prevented by another.

On this part of his work the author certainly does not tempt us to dwell, and we shall quote only one more passage from his "general remarks on the pathology of mucous membranes:"

"It is an important law of the animal economy, that there is always a determination of blood towards a part whose action is increased. In catarrh, the action of the excretory vessels of a mucous membrane is increased; a determination of blood, therefore, takes place towards them; and there is a consequent diminution of blood towards the surface. The size of the pulse, and heat of the skin, are thereby necessarily diminished. These are frequently referred to debility; but such an explanation is plainly inadmissible; for, in these cases, it is not the action of the vessels, but only the quantity of the blood circulating through them, which is diminished, whereby their caliber becomes contracted. For the confirmation of this view of the subject, we have only to appeal to facts. Great venous congestion is always found in the viscera of the thorax and abdomen of those who have died of catarrhal affections. Were the smallness of the pulse, in these diseases, owing

to debility, we might expect that this smallness should occur, and that the natural fulness should return gradually; but we invariably find that the size of the pulse is very rapidly diminished when the secretion of the gastro-enteric mucous membrane is increased, and as rapidly restored to its natural condition upon the secretion being checked. Hence it is clear that the smallness of the pulse is owing to the blood having been withdrawn from the surface." (P. 16.)

This is, indeed, a singularly gratuitous assertion. What can be supposed to make the radial artery small and contracted, unless debility produce that effect? for surely this artery cannot be deemed an insignificant vessel. And, unless from debility, (no matter how produced,) why are the pulsations of the heart itself enfeebled, and the general powers of the system so amazingly reduced?

The author's experiments on dogs do not appear greatly calculated to elucidate or discover truths of any moment. He details eight cases in which he tried the effects, produced on the mucous membrane of the stomach, &c. of emetic tartar, corrosive sublimate, calomel, and opium, given separately, and in various proportions, to different dogs.

It is very proper that men should make up their minds upon every point of practical importance; and where simple analogy and induction on the experiments and reasonings of others are insufficient to remove doubt and to produce conviction, it is highly commendable to institute experiments calculated to terminate indecision, diminish the labours of research, and finally elicit valuable truths. While, however, we are willing to commend the honesty and prudence which forbid the admission of any thing of moment in medicine uncanvassed and unproved, we ought not to pass uncensured that ill-directed zeal which inundates the press with speculations founded upon experiment, which can as little enliven the leisure of the curious as instruct the study of the industrious. We are sorry to find that the main conclusion to which Dr. Christie is led by his experiments presents no very important form, when expressed in his own terms. The first clause contains what could not be doubted; the truth of the second was long since ascertained. But we quote the passage:

"Some medicines produce an inflammatory, others a catarrhal action, in mucous membranes; and a long-continued action of certain medicines produces the former, while a short-continued action of the same medicines produces the latter effect." (P. 42.)

The author, in his remarks on calomel, says,
"Its usual action on a mucous membrane is to excite its secretion;

and in this case it renders the membrane white. If, however, its action be continued long on one spot, it gives rise to inflammation. This has been frequently observed in cholera; spots of inflammation having been observed in those parts of the mucous membrane of the stomach to which the calomel adhered." (P. 31.)

We are aware that Mr. ANNESLEY entertains the same opinion as Dr. C. respecting the *blanching* effect of calomel; but that it really possesses this property, is neither proved nor easy of demonstration: for, if M. BILLARD deserve any confidence, there is great reason to believe that the colour of the mucous membrane of the stomach and intestines is naturally white, excepting during the period of digestion, when it exhibits a slightly red tint.

That the long-continued action of calomel on one spot sometimes gives rise to inflammation, may indeed be true; but to think that this is always the case, would be very incorrect. In his interesting little work on Epidemic Cholera, Mr. BOYLE, on the contrary, relates that "fatal cases but too frequently occur where calomel is rejected as fast as it is given; or, *if retained*, is found, on examination after death, to have insinuated itself between the rugæ of the stomach, perfect in appearance, and without having had any effect whatever." (P. 56.)

Dr. C. asserts that

"There is no direct sympathy between the skin and liver; and the action of the liver and many other glands is much influenced by the condition of the mucous membrane upon which their excretory ducts open." (P. 42.)

Few, perhaps, will feel disposed to dispute the truth of the latter clause of this quotation; but we think the greater number of those who have witnessed the usual manifestations of hepatic disturbance, especially in tropical climates, will not readily admit the first. His arguments in favor of this opinion are hardly specious, and certainly not cogent; and we have too strong a recollection of the harsh and unnatural feel of the skin in dysentery, and particularly in chronic hepatitis of long standing, and of the never-failing indication of cure or amendment which the improved appearance and renewed functions of the skin so proverbially furnish in these diseases: we have too strong a recollection of these facts, to be able to adopt the author's notions, merely because an abundance of vitiated bile is passed in fevers when the skin continues parched and dry; or, on the contrary, because the skin is sometimes inundated with perspiration when the liver is apparently torpid and inert. This ought not to be considered a state, but a momentary

struggle of the constitution, which, in the attempt to relieve itself from the oppressive influence of some deleterious cause, transgresses the laws of order and sympathy, and becomes the sport of diseased and irregular action: and, consequently, these morbid tendencies must not be cited as subversive of a theory supported by numerous observations and sound reasoning. We know that objections have been started against the theory of the "cutaneo-hepatic sympathy," but we are persuaded that it cannot easily be proved to be erroneous and unfounded.

The author attributes cholera not to inflammation, but to diseased action of the mucous membranes; and his main reason for doing so is founded upon a belief that the disease always leaves traces of its operation in some part of that system, while other organs and systems are only occasionally affected.

"In all the dissections I have made, the following appearances have been present: A whitish, opaque, viscid substance was found adhering to the surface of some portions of the mucous membranes; and in many cases it was so abundant in the intestines as completely to fill parts of them of a greater or smaller extent. The stomach, and portions of the intestines, were filled with a transparent or turbid serous fluid; and frequently the viscid matter mentioned above was found intimately mixed with the serous fluid, or floating in it in the form of flakes. The mucous membranes (except when inflamed) had an unnatural whiteness, were frequently soft and pulpy, and in general (especially in the stomach and small intestines) could be easily detached by scraping, in the form of a thick pulp, from the subjacent coat. These appearances were sometimes more or less partial; but some of them were generally found throughout the whole extent of the alimentary canal. They extended, in some cases, to the mucous membrane of the bladder and ureters; and were found, in two or three instances, in the pulmonary mucous membrane." (P. 46.)

"The morbid appearances that have been found next in frequency to those already mentioned, are venous congestion in the viscera, particularly in those of the abdomen; dark-coloured blood in the veins, and sometimes in the left side of the heart; and inflammation in some part of the mucous membranes. I have generally found inflammation (when present at all) confined to the pyloric extremity of the stomach and small intestines. I have also met with many cases in which no inflammation could be detected." (P. 48.)

Many respectable names may, however, be cited who have not constantly found organic disease of the *primæ viæ* in those who die of cholera, and who believe that, when

such alteration of structure has occurred, it ought to be considered an effect and not the cause of the disease: they have also considered the cerebral affections the primary and most fatal. "In many cases the purging and vomiting have not been very violent, and people have suddenly become giddy, fallen down, and, after one or two slight efforts to vomit, have expired within a few minutes; and almost all who have been attacked have had some giddiness and pain of the head, a tendency to stupor, and have often become a little deaf. In two cases which I have seen, the jaw became locked for a time, but soon relaxed." (Dr. ALEXANDER GORDON, *Bombay Report*.) The same gentleman mentions also a well-marked case of cholera, in which the *abdominal viscera evinced no trace of disease*, though the brain presented many morbid appearances. Indeed, it would be difficult, on Dr. Christie's theory, to account for the unusually rapid fatality of this disease which is observed in some instances.

Whoever is not totally unacquainted with the history of cholera, and the many speculations to which it has given rise, will perceive that Dr. C. pretends to no originality respecting it, besides that of referring the disease to a morbid condition, not merely of the mucous membrane of the stomach and intestines, but also of the whole mucous system: and on this point, he himself informs us, that he "has had it in his power only two or three times" to verify his opinion as far as it is peculiarly his own.

The author's remedies for cholera are rather numerous, but do not differ from those usually employed for its cure, viz. bloodletting, blisters, and sinapisms, hot sand, fumigations, frictions, calomel, opium, alcohol, ether, &c.; on the merits of each of which he separately discourses; but on the treatment of the disease we shall be content with quoting one of his general remarks:

"In the catarrhal cholera there will always be two principal indications of cure, viz. to remove the diseased action of the mucous membranes, and to restore the circulation of the blood towards the surface. The first will always be present; the second only after the disease has made some progress, and in all severe cases. But, in order to effect these indications, we shall require to employ different means under different circumstances, and to vary our remedies according as certain symptoms predominate or are wanting. We cannot expect, therefore, to discover any remedy or specific that will be applicable in all cases; and it is clear that there is just as much necessity for a practitioner to exercise his judgment in treating this as in treating any other disease in the whole range of the nosology." (P. 100.)

Dr. Christie certainly manifests considerable industry and much professional information, yet we fear he has brought his theory respecting cholera prematurely before the public, since it is not sufficiently supported by unequivocal facts. Though his remarks are sometimes judicious and interesting, yet, as we have already endeavoured to show, his conclusions do not always appear logical; and he occasionally takes great pains to establish points, concerning which, we believe, scarcely a doubt is entertained.

COLLECTANEA.

Floriferis ut apes in saltibus omnia libant,
Omnia nos, itidem, depascimur aurea dicta.

ANATOMY.

Conformation of the Human Stomach.—FROM some recent observations of S. TH. SOEMMERING on this organ, it appears,

1. That the Negro stomach differs from the European in being more round, and more nearly resembling that of the monkey. This rotundity is particularly evident at its great curvature.

2. The contraction which is occasionally seen in the middle of the stomachs of some subjects, is found almost exclusively in those of females, and is apparently produced by the constant and excessive pressure of their stays upon the epigastrium. No trace of this malformation is found in children.

3. Finally, the pyloric outlet is different in various individuals, and the modifications of this orifice, (which the author, from his own observations, reduces to four classes,) are chiefly produced by a glandular zone, of rather a hard consistence, which forms the outline of the opening, and which may be discovered by cautiously elevating the peritoneum and subjacent cellular membrane.—*Denkschrift, desk Akad. d. Wissensch. Z. München*, tom. viii.

PHYSIOLOGY.

Remarkable Case of Preternatural Fœtation.—The following singular case was published many years ago, by Dr. J. M. Goon, in a little work which may probably not have fallen into the hands of our readers.

This case of preternatural fœtation was one of twins, the first of which was born alive. It had no sexual characteristic, neither penis nor pudendum. It had neither anus, funis, nor umbilicus. The legs were distorted and curved outwardly. It cried feebly once or twice after birth, and died in about ten minutes. With a little force, a small, empty, and shrivelled placenta followed, in which neither funis, umbilical vessels, nor any other appendage by which it could have been attached to the child, could be traced. No blood followed its removal from the uterus. The other child was perfect in every respect. On dissection, it was found that the right kidney adhered to, and communicated with, the bladder. There was no urethra, nor internal organs of gene-

ration; no anus, nor rectum, the colon terminating insensibly in the peritoneum.

This singular case naturally led Dr. Good into some reflections as to the mode in which the fœtus receives its nourishment in the womb, whether from the mother, through the medium of the placenta and umbilical vessels, or by the liquor amnii? He deems this case conclusive against the exclusive power of the placenta. His opinion is, that the placenta is the proper organ of oxygenation for the fœtus, and the liquor amnii its proper source of nourishment. The former, he conceives, is capable of communicating nutriment whenever the amnios may fail, or be suddenly discharged; and that the amnios is, on the contrary, capable of communicating oxygen whenever the placenta is either defective or wanting.

PATHOLOGY.

Diseases of the Spleen.—It is commonly said that, the spleen being subservient to the liver, the diseases of these two viscera are similar, and should be treated in the same manner. But there never was a more fallacious assumption than that which imagines a similarity of diseases of these two organs, nor a more false conclusion than that which suggests the employment of corresponding treatment for their respective diseases.

In the structure of the liver, the chief points of difference are its firmer and less distensible substance, the absence of an elastic cellular structure connected and freely communicating with the branches of the blood-vessels, besides the existence of an excretory duct; while the spleen appears in every point of view fitted for, and subservient to, functions totally different from secretion.

Resulting from the structure of the spleen just stated, we see it performing a train of functions as different in their nature from those of the liver as could possibly be anticipated from considering organization so totally dissimilar.

The best authenticated observations concerning the spleen tend to establish the constancy of the following phenomena:

1. When a person is suffering under the cold fit of an ague, or when by any cause the blood is driven from the surface to the interior of the body, there is general congestion of internal organs; but at the same time the spleen enlarges, and, receiving an increased load of blood, saves other parts of different structure from distention and disease.

2. On descending into the cold bath, the muscles of respiration act spasmodically; at the same time that the blood, driven from the surface by cold, causes a turgid state of the spleen, which forces up the diaphragm. A child, therefore, when put into the cold bath, will say it takes away his breath. The unpleasant sensation is felt most at the left side, and arises in consequence of the diaphragm being pushed up by the spleen, and thereby encroaching on the left side of the chest and heart.

3. When, from riding, running, or other violent exertion, the circulation is subject to sudden agitation, the spleen becomes distended and painful, from accumulation of blood. Long-continued and violent laughter causes a sensation as if the side were splitting. But exercise, gradually increased until there be a free perspiration, is very rarely attended with pain in the left side.

4. When the system is suffering from the tumultuous agitation of ungo-

vernable anger, nature would be overpowered, and the vessels of some weak part would burst, were not the distensible structure of the spleen ready to admit a temporary accumulation of blood, and thus preserve other organs from injury.

Under all these circumstances of circulation suddenly repressed from the surface of the body ; as in the cold stage of intermittent fevers, or by cold applied to the skin ; also in cases of sudden agitation of circulation, by riding, running, or violent laughing, or during the tumultuous movement of violent passions of the mind ; we find the spleen acting the part of a safety-valve to obviate sudden and violent pressure,* under which the vascular system would otherwise in some parts be apt to burst. In these cases, Dr. Rush truly says, "the spleen performs the office of a basin held by the hand of nature, to receive for a while several pounds of blood, in order to preserve the system from disease and death."

The experiments of Magendie show the effect which changes in the balance of the circulation produce on the size of the spleen. He states, that if the abdomen of a living dog be opened, so that the spleen and other viscera can be observed, and a pint of blood injected into one of the veins of the extremities of the animal, the spleen will increase one-third or one-half beyond its former dimensions, and be infinitely more distended than any other internal organ. Also, if the abdomen of a dog be opened, and the viscera viewed while the animal is bled to fainting, the proportional decrease in the size of the spleen is much more than the decrease of other viscera.

The fact that men have, in a few rare cases, survived the loss of a portion of the spleen, and in one or two instances even of the whole of that viscus, can hardly be urged against the facts and opinions above stated, until repeated observations of similar cases in man shall prove that the absence of the spleen can be generally endured without injury, and that the action of no other organs can compensate for its loss.

Even in the slow and silent operation of long-continued grief and distress of mind, whereby the secretions are perverted, the cutaneous circulation becomes languid, transpiration is obstructed, and we often find enlargement of the spleen takes place. Such cases are always difficult to cure.

My observations on the uses of the spleen entirely concur with the opinions of Dr. Benjamin Rush. Sentiments somewhat similar to those of Dr. Rush

* Repeated overdistention of the spleen is not endured with impunity by patients who have intermittent fevers, especially if they have been long subject to the debilitating influence of miasmata. After a person has been subjected to frequent returns of ague, or of remittent fever, the spleen is not only large, but there is morbid sensibility on pressure. Repeated overdistention during febrile paroxysms gives rise to a sort of internal subacute inflammation; in which state a free use of stimuli is followed by that form of disease which I have denominated the irritative stage of tumid spleen, and its consequence is frequently a thickening of the internal structure, by which the contractile power of the spleen is diminished or lost; and, unless remedied by timely means, an intractable chronic induration of the spleen is the result.

When the spleen has become diseased and incapable of distention, hemorrhages from the nose, lungs, or stomach occur. If profuse, these hemorrhages suddenly destroy life; but, when more moderate, they almost always afford temporary relief, and if the other functions of the system (that have been disordered) be then restored, the patients sometimes recover entirely from the local disease of the spleen.

are adopted by Mr. Hodgkin, who has written an ingenious essay on this subject.—*Extract from Mr. TWINING's Paper on Diseases of the Spleen, in the Transactions of the Medical Society of Calcutta.*

Case of Hydrophobia; by Mr. F. GODDARD.—On Thursday morning, the 25th November, I was called up, about seven o'clock, to see a man who I understood was exceedingly ill, and waiting in the surgery very impatiently for my arrival. I found my patient (Mr. Barham), a fine looking old man, about sixty, labouring, at intervals of about five minutes, under strong spasmodic paroxysms, affecting the muscles concerned in breathing and deglutition. There was a wildness and an impatience depicted in his countenance, totally different from any thing I had ever observed in other spasmodic affections. His bowels were open, tongue clean, skin moist, pulse full and a little accelerated. I took away twenty ounces of blood, and prescribed a mixture containing ʒss. of laudanum for a dose every hour, until I should see him again.

He walked home, half a mile from my house (Gloucester road, Old Brompton), and left me ruminating on the probable cause of so much mischief occurring suddenly in a fine healthy subject.

At ten, a message was sent, saying that he was much worse, and requesting me to call as soon as possible. He received me tranquilly, and said he was very glad that I had come to see him, for he was very ill. His symptoms were now more distressing than when I first saw him; he looked wildly and suspiciously at every one entering his apartment, and his breathing was accompanied by a short convulsive sobbing. On looking at his medicine, I perceived he had taken none, and expressing my surprise, he assured me it was impossible for him to swallow a single drop, as the attempt had been followed by violent spasms, and produced so much distress that he had desisted. At this period no one had the slightest idea of the origin of his malady. I poured out some medicine into a teacup, the very act of which produced much excitement and alarm. My first impression as to the true nature of his disease arose at this period, from the circumstance of his requiring a teaspoon, with which he endeavoured to take some of the medicine. The attempt produced much excitement and alarm, and after two or three painful efforts at deglutition, with one desperate effort he swallowed a teaspoonful, threw away the spoon, and begged, unless I wished to destroy him, that he might have nothing more to swallow. I now left the room, and inquired of a bystander whether any thing particular had occurred to him within the last few weeks? On recollection she said, "About a month since, late at night, a strange dog came into the premises, and fought with his own dog; he got out of bed to separate them, and the strange dog bit him in two places, on the left arm and hand; and bit a puppy, which died about a fortnight after in a strange way, which was thought to be some kind of a fit." To ascertain if this occurrence had produced any effect on his mind, while again bleeding him I said, "You have been in the wars, sir, and had your hand and arm torn: how did it occur?" "Oh!" said he, carelessly, "that was done by a dog a long time ago, but it healed." The circumstance was never again mentioned to him, and he died in total ignorance of the cause of his malady. The wounds were perfectly cicatrised, and there was not the least action going on indicative of recent absorption. He bore the bleeding pretty quietly: forty ounces were removed, which on cooling presented strong marks of inflammation.

Ordered $\text{miv. Acid. Hydrocyan. omni horâ}$, in a little water.

Twelve o'clock.—With much difficulty he has taken two doses of the acid ; pulse full and hard, 110. Thirty ounces more blood were removed.

Three o'clock.—Has taken two more doses. Complains of a dreadful sense of suffocation, and implores that nothing more may be given him. Pulse full, and beating at 120 to 130.—Continue the acid.

Eight o'clock.—Pulse full and hard. Has taken in all 24m. of the acid ; but so painfully distressing has the deglutition now become, that all attempts at repeating his medicine are discontinued.—V.S. ad 3xxx.

During the bleeding, he looked wildly at the basin, and begged that no more might be spilt, (a drop or two had fallen,) repeating frequently, in great agitation, as the blood was running, "Take care! take care!"

Between two and three o'clock next morning, my assistant (Mr. Davies) visited him. He found him tolerably passive, but observing every movement with intense anxiety. Pulse full and hard, face flushed, eyes denoting cerebral irritation. He had been at times outrageous. On its being intimated that bleeding was again necessary, a paroxysm came on more intense than any preceding, and with great effort he submitted. As the blood flowed he became more and more alarmed, till at length he got quite unmanageable: he raged violently at his nephew, who was holding the basin, and ordered it peremptorily to be removed. Thirty or forty ounces were taken away. It was found necessary to put on the strait-waistcoat.

About four o'clock Mr. Davies wished him to take some more of his medicine. He said "I can take no more;" and, on reaching the bottle to put out a few drops, he became violently agitated, threw himself from side to side, and, as well as the incessant spasmodic sobbings would allow, he begged that not one more drop of any thing might be offered him, and that the bottle might be taken from his sight. He did not become tranquillised until its removal.

He lingered on till ten A.M. in the same state, a few minutes before which he insisted on getting up, and walked a short way down his garden, returned, laid down on his bed, and died.

Mr. FREDERICK SALMON, of Old Broad street, and Mr. WILSON, of Chelsea, were kind enough to assist me in conducting the post-mortem examination. On opening the chest, the heart was free from disease, with rather more water in the pericardium than natural. The lungs were completely gorged with grumous blood, and the pleura adherent on the right side. On removing the cranium, which was remarkably thin, and cutting the substance of the brain, numerous red spots presented themselves in the medullary portion; about a tablespoonful of water in each ventricle; the plexus choroides was turgid; the corpora striata, thalami, and basis of the brain, every where preternaturally injected; the cerebellum, crura cerebri, and cerebelli, in a high state of inflammation. On removing the spinous process of the vertebræ, the whole cord was considerably inflamed; and, opposite the two last cervical and dorsal vertebræ, the cellular substance was studded with dark patches of coagulated blood, the theca vertebralis thickened, and the cord in an active state of inflammation. The larynx and pharynx bore not the slightest vestige of disease.

The preparation of the cord is deposited in the museum of the London University.

The post-mortem examination of this case tends to prove the correctness of Professor THOMPSON'S theory of the proximate cause and seat of this afflicting malady; and the plate accompanying a case recorded by him, in the 13th volume of the Medico-Chirurgical Society, gives a faithful delineation of the state in which the spinal cord was found in this case.—*Med. Gazette.*

PRACTICAL MEDICINE.

Acupuncture in India.—The Hindoo physicians, when ordinary means have failed in cases of diseased spleen, have recourse to the introduction of iron needles, heated red hot. They are plunged into the side, above the spleen, in various places, according to the discretion of the operator, usually not fewer than seven nor more than twenty. It seems likely that they penetrate its substance. The needles are made to penetrate to a considerable depth, according to the native's idea, through the spleen. The operation is attended with violent pain, but is said rarely to fail of success.

Acupuncture.

CASE I. *Hysteria, with Paralysis and Contraction of the Limbs.*—A woman, twenty-eight years of age, of a delicate constitution, whose general health was bad, and who had been from the age of fourteen subject to hysteria, and various remedies having been tried, to remove the disease, such as general and local bleedings, blisters, the use of the vapour bath, accompanied by the successive exhibition of all the known antispasmodics, without the least success; she was admitted into the Hôtel Dieu, with the following symptoms:

Emaciation of the body; countenance clay coloured; hemiplegia of the left side; tongue red, and incapable of being protruded out of the mouth; apyrexia; thirst; loss of appetite; nausea; a fixed and circumscribed pain of the epigastric region; a periodical pain in the hypogastric region, before and during the fits; hardness and tenderness of the abdomen; with loss of speech, after the fits.

By bleeding twice, and by the use of diluents, the speech was restored, and also the use of the left side. But shortly afterwards two fresh attacks of hysteria presented themselves: they were preceded by the usual symptoms, immoderate laughing; excessive irritability of the senses; violent palpitations of the heart; a universal sweat; an acute pain in the occiput and along the spine; respiration short, irregular, and frequent. The fit then showing itself by constriction of the throat, sometimes with the sensation of a ball rising from the abdomen into the chest, the head being thrown back, the eyes being wide open and fixed, the pupils dilated and insensible to the action of light, loss of hearing and smelling, foaming at the mouth, deglutition impossible, stertorous breathing, convulsive motions of the muscles; flushed and bloated countenance; hypogastric region tense, hard, and painful to the touch: all these phenomena diminishing at intervals, and during the intervals she experienced great thirst and desire to drink cold water; but no sooner had the patient swallowed some of the fluid, than all the above symptoms were renewed with their previous severity. After the space of two hours, the time which the fit lasted, she recovered her senses; the palpitations of the heart were diminished; the pain of the occiput and that of the hypogastrium

continued for some hours, with great thirst, tongue red and dry, limbs benumbed.

A few days afterwards, a similar fit took place to that described above; after which there were hemiplegia of the left side, immobility of the tongue, aphonia, difficult deglutition, a frequent strong pulse. She was bled generally and locally, and antispasmodics were administered, but without any good effect.

She remained in this state for three days, when menstruation took place, which had ceased for the last ten months. In the evening of this day, the patient could articulate some words in a low voice, and the tongue was more capable of being moved.

After the lapse of a week, the contraction of the limbs still continued very strong and very painful. She was bled in the contracted arm, and, as soon as the lancet had penetrated the vein, the fingers, which were before bent upon the forearm, extended, and acquired their usual movements.

The contraction of the leg continued, with pain in the loins, for three days, notwithstanding general and local bleedings, baths, &c.; when four needles, of an inch and a half to two inches in length, were introduced into the lumbar region. Three hours after they were withdrawn, the patient could walk, to her great astonishment. The pain of her loins also was removed.

The next day she had a violent pain in the left thigh. Two needles were introduced on the posterior part of the leg, in the tract of the sciatic nerve: the pain subsided, and on the same day she was able to walk freely.

On the following day there was again a pain in the internal part of the leg and upon the foot. Two needles were introduced into the painful part of the leg, and in four hours after they were removed, when the pain almost instantaneously ceased.

Two days afterwards, two needles were placed in the back part of the foot, and after their removal the pain subsided, and the movements of the foot were free and easy.

In a week the patient was quite free from pain, and could use her limbs freely; when in the morning she began to experience the precursory symptoms of a fresh attack of hysteria. Six needles were immediately introduced: two in the cervical region, two in the dorsal, and two in the lumbar. All the symptoms disappeared, and the fit did not take place.

On the evening of the ensuing day, the same precursory symptoms manifested themselves, but less violent than those of the day before. Three needles were immediately introduced into the cervical region near the occiput, where the pain was the greatest; and all the symptoms were removed.

Five days afterwards, the patient, knowing that she was about to have a fit, desired that the needles might be introduced. Four were placed in the neighbourhood of the occiput, and the fit was completely prevented; some muscular contractions only taking place after the introduction of the needles.

Having for many days experienced no precursory symptoms of hysteria, she left the hospital with the idea that she was cured; but during the month of the following May she experienced a numbness in the left arm, the catamenia having been suppressed by fright. On the 17th of May she returned to the hospital, and experienced every day one or more hysterical fits, which brought on again hemiplegia of the left side, contraction of the limbs, and even numbness of the right hand.

The means which were employed when she first entered the hospital in January were again repeated, and presented the same phenomena, and were crowned with the same success. In fact, the hysterical fits were again dispersed by acupuncture. The hemiplegia and the pains were removed by this means; and the bleeding removed the contraction of the arm a second time, as soon as the puncture with the lancet was made.—*Archives Générales.*

SURGERY.

Femoral Aneurism, by M. DUPUYTREN. Difficulties and Dangers anticipated—On November 18th, a man was brought into the amphitheatre, with an aneurism of the femoral artery, about nine inches in length, and five or six in breadth. On being questioned as to its origin, he stated that, about a month previously, he was attacked with shivering, and soon afterwards, feeling pain in the thigh, he examined the affected spot, where he discovered a small tumor. As aneurism is not commonly ushered in by shivering, he was again particularly interrogated by M. Dupuytren, and remained firm in his statements; but the man seemed to be in such a state of depression and stupidity, that no great reliance could be placed on his account.

The pains had latterly been lancinating, and shooting down into the leg. Some person, whom he had consulted, applied leeches and cataplasms of hemlock, with acetate of lead. The symptoms, and among them the shiverings, continued for a fortnight. At length he was unable to walk; and, during the space of another fortnight before his admission into the hospital, he was confined to his bed, where the tumor daily increased in size, while his general strength declined. The pulsations were manifest to the eye at a distance of ten yards.

On the morning after admission, the increase of the swelling was so great as to render the immediate application of the ligature necessary, as delay might have been speedily fatal, by the rupture of the sac. Although no doubt could be entertained of the necessity for the operation, from the imminent danger that existed, yet the circumstances of the case excited great uneasiness in the mind of M. Dupuytren; and, in giving a clinical account of the difficulties he should have to contend with, and, above all, the uncertainty of success, he eloquently yet briefly depicted the wretchedness of the surgeon under these circumstances.

It was deemed advisable to place the ligature as near as possible to the upper edge of the tumor, and this was just below the part where the profunda is usually given off. "We know (says M.D.) that if we tie a vessel near the part where a large branch is given off, the coagulum cannot form. But does this necessarily prevent the obliteration of the tube by adhesion? I think not; and were it otherwise, the ligature might be carried above: for, if the circulation of the limb can continue after the ligature on the external iliac, it would be unimpaired by the same operation in the groin." The possibility of cutting the vein was suggested, in which case M. Dupuytren proposed to divide it, and tie the two ends.

The integuments were distended with fluid, and the anatomical character of the part he considered less favorable for the application than under the sartorius. Admitting that it required more caution and skill, yet the difficulty could not be considered great. The bare notion, indeed, of mishap in the present instance arose from the rapid growth of the tumor; and the chances of

failure, from the depression of the patient, and from other circumstances over which we can exercise no control.

It would be unfair to suggest that M. Dupuytren wished to load his colleague with a burthen, the weight of which he felt himself both unwilling and unable to support. Be that as it may, he offered to resign the operation to M. Sanson; which he politely declined accepting.*

The man being placed on the table, an incision was made down to the aponeurosis, which was carefully opened, and, by means of a probe-pointed and curved bistoury, divided upwards and downwards. The artery was discovered, separated from its accompanying vein and nerve, and a small ligature was applied in the usual way.

The morning after the operation, no unfavorable symptoms had occurred. He was free from pain about an hour after the operation, and had seven hours of uninterrupted sleep. He had been bled, and warm flannels had been constantly applied to the leg.

His tongue is coated, and his pulse full, but there is not the slightest reason at present to despair of his recovery. (*From a Correspondent at Paris.*)

Cases of Excision of the Uterus.—CASE I.—Fany Guillon, thirty years of age, experienced, about six years ago, pains in the womb, which came on after her delivery. Her sufferings having greatly increased, she was examined, and a considerable softening of the neck of the womb, with ulceration, was discovered.

She was bled, and the vagina was filled with a liquid cataplasm and the Decoction Solani nigri.

On the following morning, on examination by means of a speculum, the neck of the uterus was found four times its natural size, and softened to the extent of three-fourths of its surface. On the left was a hard point, at first supposed to be a tubercle. Ecchymoses were perceived on the surface, with small vegetations, which bled on the smallest contact. A deep ulcer existed round the os tincæ, in extent about two lines. Slight erosions were here and there on the other part of the cervix. These were accompanied by lancinating pains, which were intermittent.

M. Lisfranc thought that the only course to be pursued was amputation, but determined on trying the effect of the ordinary treatment. Bleeding, injection of liquid cataplasms and of decoction of solanum, warm baths, warm hip baths, emollient clysters, severe and vegetable regimen, were tried during seven weeks.

Towards the end of August, the progress of the affection was observed to be unfavorable: it threatened to usurp the whole vaginal insertion of the peritoneum. The emaciation and debility of the patient sensibly increased; yellowness of the skin was strongly marked. A fetid discharge took place, and was accompanied by acute lancinating pains. Under these circumstances it was thought advisable no longer to defer the operation.

The smallness of the projection of the womb in the vagina compelled M. Lisfranc to perform the incision within this canal. The softening of the

* M. Sanson is the second surgeon of the Hôtel Dieu, and into his ward the patient was first received. But the junior surgeons of the French hospitals never perform operations, unless through the complaisance of their seniors.

posterior part of the cervix was such that the double branch of the hooked forceps caused its laceration, although not to a sufficient extent to impede the operation; during which she lost but little blood.

She was immediately conveyed to bed, and the house surgeon was instructed to be constantly with her, that he might be ready to act in case of hemorrhage, but not to plug the vagina without absolute necessity. Four or five paillets of blood were voided in about twelve hours. She had nausea, vomiting, syncope, with griping pains, accompanied by frequent desire to evacuate both urine and feces. The hemorrhage was not such as to require the plugging of the canal.

On the twenty-second day after the operation, I saw her in a most satisfactory state, and no doubt of her recovery existed.

CASE II.—A female, aged about twenty-one, had been treated, for the space of two years, for an extensive ulceration and slight enlargement of the neck of the uterus. Having derived no benefit, she determined on submitting to the amputation of the part. Her state of body was not favorable for it. She had just recovered from a gastro-enteritis, by which she had been emaciated and enfeebled; but a fear that the progress of the disease might render the operation impracticable, made her anxious to have it speedily performed.

On the 8th of August it was performed by M. Lisfranc, in the Maison de Santé de la Rue de Valois. The relaxed state of the ligaments permitted the descent of the uterus low down, and the excision was made as before described. Slight hemorrhage took place during the day, but no bad symptoms followed.

On the 18th, the wound was examined by means of the speculum, and found clean and healthy. Injections of chloruret of lime were used for the purpose of detaching the ulcer, and of hastening cicatrization.

On the 7th of September, slight granulations remained, which were touched by the liquid protonitrate of mercury.

15th.—Cure complete, and patient had recovered a healthy appearance.

Arabian Mode of curing Fractured Limbs.—The Orientals will never consent to have a limb cut off. Their practice is to lay the limb on an oiled mat after reducing the bones, and then enclose it in a case of gypsum, or plaster of Paris; an operation they perform much in the same way as is practised by statuary to take a cast of a limb. They first pour the plaster of Paris under the limb, until it rises to such a height as to touch the whole lower surface, filling up all inequalities, so as to form a sort of bed; placing at the same time a few hollow reeds, at proper distances, and in such position as to serve to conduct away, through the plaster, any fluid that might collect in the gypsum case, from the wounds, &c. When this becomes firm, which it does in a very short time, the limb is next covered with the same plaster of Paris, so as to enclose it completely, and, on hardening, to form a light case, or plaster boot, to keep the parts in as natural a position as possible. They next make a sort of furrow, or channel, in the soft plaster, on the upper surface, to receive such vulnerary fluids, during the treatment, as they think conducive to the cure, and which filter through the gypsum to humect the leg at pleasure. To render this upper shell more easily removed or changed during the cure, if necessary, to examine the state of the parts, &c. they make deep incisions into the soft

plaster, both lengthwise and across, though not quite through, by means of which the upper case is removed without disarranging the limb. The firmness of the lower part, or bed, makes the removal of the whole boot practicable, should such a measure at any time be found expedient.

Our readers will remember that Baron LARREY has lately practised a somewhat similar mode of treating fractured limbs, with much success. The Baron does not make use of a case of plaster of Paris, but surrounds the limb with bandages which have been soaked in some glutinous matter, which forms nearly as firm an envelope as the plaster of Paris.

MIDWIFERY.

Absorption by the Uterus. (Extract of a letter from Dr. F. C. NÄGELS, Professor of Midwifery at the University of Heidelberg, to Dr. L. F. VON FRORIEP, of Weimar, Editor of a periodical publication entitled "Notizen aus dem Gebiete der Natur und Heilkunde." Communicated by EDWARD RIGBY, M.D.)

During the year 1802, the following case occurred to my notice: A lady of high rank, in consequence, probably, of a somewhat fatiguing journey, from which she had just returned, was brought to bed between the twenty-fourth and twenty-sixth week of her pregnancy: the child lived several hours after birth; little hemorrhage followed, but the placenta did not come away. The cord, which was very thin, had been torn off at its insertion, as far as could be judged from the length of it. The midwife, who was an experienced as well as a highly respectable person, informed me that it had occurred as she passed her finger along the cord to ascertain whether the afterbirth were already separated; and assured me that she had not exerted too much force in endeavouring to extract it, in which account the by-standers also agreed.

The lady and her friends were under considerable alarm on account of the placenta not coming away; and the midwife, who suffered not less anxiety for her patient, scarcely quitted the bedside for the first nine days, and even passed the night in her room; so that the case was watched with the greatest attention.

The lochia, which were sparing and devoid of fœtus, and with scarcely any coagula of blood, lasted only four days. A slight attack of fever was experienced twenty-four hours after delivery, unattended, however, with any pain of the abdomen. The breasts did not swell, the menstruation returned in eleven weeks, and in about three years after she bore a child at the full period of pregnancy.

In another case, in 1811, where abortion had occurred between the fourteenth and fifteenth week, from no assignable cause, and with scarcely any hemorrhage, and which I had an opportunity of observing with the greatest accuracy, the secundines did not come away; a febrile attack came on upon the third day, which soon disappeared; no local pain, no discharge from the parts of generation; the menses returned after nine weeks, and no traces of the placenta, &c. ever appeared.

An experienced accoucheur of this place (Dr. GÖTZENBERGER) has had the opportunity of attentively observing two cases of this kind, and assured me positively that he was perfectly convinced that no trace of the placenta had been detected, either in a solid or in a partly dissolved state.

January 19, 1848, I was sent for to attend a patient, aged twenty-four, the

wife of a respectable farmer, living about ten or twelve miles from this place. She had been brought to bed of her second child the day before, at eleven o'clock in the morning, and the afterbirth had not yet come away. In the afternoon flooding had come on, which had been so considerable as to induce repeated fainting. Dr. SIGEL, a physician of considerable experience, and M. ROTH, an accoucheur, had been sent for from Ladenburg, and, on examination, had found retention of the placenta, in consequence of hourglass contraction of the uterus, which had prevented the hand being introduced for the purpose of separating and bringing it away. Tinct. Cinnamom. with a little laudanum, had been prescribed, and warm fomentations directed to be applied to the abdomen, to remove the spasmodic contraction. The flooding returned several times during the night and following day, and the discharge had begun to be very fetid.

I did not see the patient till thirty hours after delivery: I then found her very pale; the pulse quick, small, and somewhat excited; the uterus pretty firmly contracted, with no marks of hourglass contraction, but almost perfectly round; the discharge was extremely fetid, and I could feel a portion of the placenta within the os uteri. From the circumstances of the case, I considered the afterbirth as already separated; in which opinion the aforementioned medical gentlemen, and my friend, Dr. Rigby, (who had accompanied me,) agreed. Having deemed it necessary to remove it, I introduced my hand for this purpose, after experiencing considerable resistance from the contracted state of the uterus, and found the greater part of the placenta firmly attached to the uterus. This circumstance, combined with the obstinate and unruly behaviour of the patient, allowed me to separate and bring away scarcely two-thirds of the placenta: considerably more than one-third was left in the uterus, and the medical men present were convinced of the fact. The hemorrhage did not return. Injections of Infus. Fol. Salv. off. were repeatedly thrown up during the night and following day, but brought away scarcely any coagula of blood.

A smart attack of fever followed in about four-and-twenty hours after the operation, with violent headach, strong and full pulse, and considerable increase of temperature; the abdomen was not painful, even upon pressure; the breasts remained flaccid, although the child had been repeatedly applied by my order; and there were no signs of lochia. Almond emulsion, with nitrate of potass, and cooling drinks, were ordered; the bowels were evacuated by clysters, and an infusion of camomile flowers every now and then injected per vaginam. On the third day, however, the breasts began to swell, and a secretion of milk followed, but the child, which was weakly, refused the breast. The fever abated, and the milk again disappeared.

She enjoyed perfectly good health till the 27th of January, when the left eye was attacked with inflammation, which, in spite of all attempts to check it, rose to such a degree of intensity as, in a few days, to induce opacity of the lens and vitreous humor, with loss of sight in the organ. The menses returned in thirteen weeks after her delivery, in the usual quantity and duration; and at the present time, with the exception of blindness in one eye, she is in perfect health.

This case has been observed with the greatest attention, and the combination of circumstances that may be considered as having caused the ophthalmia, the obstruction to the secretion of milk, and suppression of the lochia, still further induced me to pay particular attention to the nature of the discharge.

As this circumstance interested me considerably, I have endeavoured of late years to excite the attention of several of my professional friends, and at various times have received accounts from them confirming the truth of my observations, both in cases of premature labour, where the placenta had been retained, as also of labour at the full term of pregnancy, where large portions of it had remained attached, where no traces of it in either in a solid or half-dissolved form had come away, and this had occurred without any injurious consequences.

My friend Professor SEBASTIAN, of this place, having lately returned from a journey to Holland, has communicated to me a most interesting case, which he received from the mouth of Dr. G. SALMON, of Leyden, where, after labour at the full period of pregnancy, the whole placenta had been absorbed, and the case terminated successfully. Dr. Salmon requested him to ask me if a case of this kind had ever come under my notice.

I am far from denying the liability to deception in cases of this sort, and am well aware how extremely difficult it is to form a correct opinion upon them. A comparison of this with processes of a similar nature, more especially with those that are observed to take place in cases of extra-uterine pregnancy, and also in animals, and a more elaborate discussion of the subject in a practical point of view, which has engaged my attention for some time, has made me very anxious to avail myself of the experience of others who may enjoy more extensive means for observation than myself. I have therefore taken the liberty of sending you this short and cursory communication, with the request that you will do me the favor of inserting it in your valuable Journal.—*Medical Gazette.*

Double Uterus ; Double Conception.—Dr. GRIS, during his attendance on a lying-in patient, observed that the pains were entirely limited to the right side of the uterus, and that this side was elevated as high as the thorax ; the left only extending to the umbilical region. The external organs of generation and os uteri were perfectly formed ; and, on examination, the shoulder of a fœtus behind the membranes was distinctly felt. Immediately after the birth of the child, the right side of the abdomen diminished in volume ; the left remained in *statu quo*. In about an hour after, labour pains again returned, and, on examination, Dr. G. discovered, beyond the orifice of the uterus, a membrane, distended by fluid, projecting through an annular opening in the left side of the uterus. The umbilical cord of the infant born passed to the upper part of a cavity similar to the uterus. On further examination, the abdomen of a child was distinctly felt at the opening above mentioned. Turning in this instance, as in the first, was necessary, which was not accomplished without difficulty. As the labour was not entirely finished, Dr. G. introduced his hand into the uterus, and thus convinced himself that this organ was double. The placenta in the right uterus was first thrown off, and the uterus contracted vigorously ; but in the detachment of the second placenta, from the left uterus, the contractions were feeble, and the woman lost much blood : she, however, ultimately recovered.

Two years before, this woman had been delivered of one infant only, after a very difficult labour.—*Rust's Magazine*, vol. xx.

NATURAL HISTORY.

Lime is one of the most universally diffused bodies in nature; and it would not be difficult to suppose that enough of this might be afforded by the aliment for ordinary purposes; but then there are some animals, as the testaceous and crustaceous, in which so large a quantity is requisite, as to make it impossible to consider the supply as depending entirely on the food taken in. Some accurate observations have been made as to the quantity of calcareous matter produced in eggs in a certain time, by a hen fed in a known way; and it has been satisfactorily ascertained that more calcareous matter was elicited than could be accounted for by that which was received as aliment. Here, therefore, there was either a generation of such calcareous matter by the powers of the system, or this substance must be a compound body, formed by some decompositions or new combinations of substances, whose chemical nature and mode of combination have not been sufficiently understood.

Similar difficulties have occurred in the vegetable kingdom; for, in answer to a prize question proposed by the Berlin Academy, to determine the constituents of the different kinds of corn, and to ascertain whether their earthy part is formed by the process of vegetation, it was at length discovered by SCHRADER, a Prussian, that seeds will grow, and produce corn yielding as much or more earthy matter than the original seed, when removed from all contact of earth, and watered merely with distilled water. The experiment was made on seed planted in sulphur, placed in a garden, at a distance from all dust, in a box to which the light and air had a free access, but from which all dust and rain were carefully excluded.

In confirmation of the same extraordinary circumstance, SAUSSURE found that plants growing in a calcareous soil, which contained little or no silica or flint, will nevertheless yield a considerable portion of that substance; and other chemists have discovered, in the ashes of some descriptions of pines, more than sixty-five per cent. of lime, when no traces of this substance could be found in the soil.

All these circumstances, therefore, discover that the powers of chemistry are inadequate to detect the processes which are continually carried on in the animal as well as the vegetable economy, for supporting life and promoting growth.—*Conversations on Animal Economy.*

Indications of Wholesomeness in Mushrooms.—Whenever a fungus is pleasant in flavor and odour, it may be considered wholesome: if, on the contrary, it have an offensive smell, a bitter, astringent, or styptic taste, or even if it leave an unpleasant flavor in the mouth, it should not be considered fit for food. The colour, figure, and texture of these vegetables do not afford any characters on which we can safely rely; yet it may be remarked that, in colour, the pure yellow, gold colour, bluish pale, dark or lustre brown, wine-red, or the violet, belong to many that are esculent; whilst the pale or sulphur yellow, bright or blood red, and the greenish, belong to few but the poisonous. The safe kinds have most frequently a compact brittle texture; the flesh is white; they grow more readily in open places, such as dry pastures and waste lands, than in places humid or shaded by wood. In general, those should be suspected which grow in caverns and subterraneous passages, on animal matter undergoing putrefaction, as well as those whose flesh is soft or watery.—*Quarterly Journal of Science.*

Method of preserving Seeds fit for Vegetation.—Fill an old cask half full of earth, put the seeds as near as possible to the middle of the cask, then fill the latter entirely with moist earth, pressing it down, and finally closing the cask so that neither air nor water may enter it. Keep it from contact of seawater. In this manner seeds may be brought from the East Indies or New Holland, in a state of perfect preservation and fit to vegetate.—*Gardener's Mag.*

Preparation of Grain and Seeds by Chlorine.—M. REMOND has been convinced, by numerous trials, that grain of all kinds, maize, the seeds of cruciform plants, potatoes, &c. by treatment with chlorine, are very much increased in vegetative power, are sooner ripe, and produce a crop three or four times as great as that obtained under ordinary circumstances. His process is to steep the seed for twelve hours in river water, (never in well water,) then fourteen or fifteen drops of a strong solution of chlorine is to be added to each litre (two pints) of water, the whole well mixed, and the maceration of the seed continued for six hours longer, in the sunlight and under a bellglass; or, for want of a bellglass, under a cover made with oiled paper. The seed is then to be separated from the liquid on a cloth, and, for the convenience of sowing, mixed with a sufficient quantity of cinders, sand, or dry earth. When sown, the water of maceration is to be poured over the ground. When possible, it is advantageous to water the ground once or twice, at long intervals, with water acidulated by muriatic acid, and in the same proportions as those mentioned. In addition to this process, the ground must be cultivated in the ordinary way.—*Courier de l'Ain. Bull. Univ.*

Employment of Slates for hastening the Maturation of Fruits.—A vine branch had been trained above the window of a house facing the south, according to custom in certain parts of France. Beneath this branch was a small slate roof, about three feet wide, serving to shelter a door. It was remarked that the grapes on this roof were ripe and black, while those on the rest of the branch were yet green. This effect, evidently due to the heat accumulated in the slates from the rays of the sun, has been advantageously employed in assisting the ripening of wallfruit.—M. RAUGHARD, *Bull. Univ.*

New Kind of Coffee.—Endeavours have often been made in France to discover a substitute for foreign coffee. According to M. PAJOT DESCHARMES, the seeds of the broom answer this purpose exceedingly well, according to the opinion of a person who has taken it for twelve years. Being moderately roasted, ground, and prepared in the manner of ordinary coffee, this person finds no difference between it and coffee. It is not the garden but the forest broom, the seeds of which are to be taken for this use. It appears that in that part of Holland bordering upon Germany this substance has been used instead of coffee for many years.—*Recueil Industriel.*

Maturation of Wine.—M. DE ST. VINCENT, of Havre, states, from his own experience of long continuance, that when bottles containing wine are closed by tying a piece of parchment or bladder over their mouths, instead of using corks in the ordinary way, the wine acquires, in a few weeks only, those qualities which are only given by age in the ordinary way after many years.—*Nouveau Journal de Paris.*

MISCELLANEOUS.

Discovery of the Mode of Making the Diamond.—At a meeting of the Academy of Sciences, on November 3d, M. GANAL stated that he employed phosphorus for the purpose of decomposing the carburet of sulphur, by which the carbon was set at liberty under the form of small crystals, having all the properties of the diamond, and possessing the power of cutting or scratching the hardest bodies. If sticks of phosphorus are introduced into a matrass containing carburet of sulphur, covered with a layer of water, as soon as the phosphorus comes in contact with the carburet, it dissolves as it would in water of 140° or 158° of Fahrenheit, and is precipitated to the bottom of the vessel. The mass, then, consists of three distinct layers: the upper part of pure water, the second of carburet of sulphur, the third of liquified phosphorus. If the liquor is agitated while in this state, so as to mix the different substances, it becomes milky and turbid, and, after remaining some time still, it separates anew, but apparently into two layers. The upper is formed by pure water, and the lower by phosphuret of sulphur. Between these layers is a very thin one of white powder, and which, when the matrass is held towards the rays of the sun, produces all the effects of a prism, and consequently seems to be formed by minute crystals.

The author, encouraged by this experiment, endeavoured to obtain more voluminous crystals, which he succeeded in doing by means of the following process: He introduced into a matrass, which was kept perfectly still, first eight ounces of water, then eight ounces both of carburet of sulphur and of phosphorus. As in the preceding experiment, the phosphorus first dissolved, and the three liquids took their stations in the vessel according to their specific gravities. After twenty-four hours, a very thin pellicle, consisting of a white powder intermixed with air bubbles and different centres of crystallization, was formed. After some days these pellicles gradually increased in thickness. The separation of the two lower liquids became less distinct, and after three months they seemed but one substance. The experiment having been left in action for another month, it became necessary to discover the mode of separating the crystallised substance from the phosphuret of sulphur, which was difficult on account of the inflammable nature of the substance. After various trials, more or less successful, the author determined to filter the whole through chamois leather, which he placed under a glass bell, renewing the air from time to time. At the end of a month the skin was washed and dried, when M. Ganai was enabled to examine the crystallised substance which remained on its surface. Exposed to the rays of the sun, it presented numerous crystals, reflecting all the colours of the rainbow: twenty among them were large enough to be raised with the point of the knife; three others were as large as a millet seed. The latter were submitted to the inspection of M. Champigny, director of the jewellery workshops of M. Petelot, and they appeared to him to be real diamonds. M. Gay-Lusac stated that, to his knowledge, M. Ganai had been occupied in the same research for a period of eight years.

Five years since, in the month of January 1824, M. DELATOUR deposited with the French Academy of Sciences a paper, whose contents were then unknown, but have since proved to relate to the manufacture of the diamond, and contain, we presume, the results of the first essays of this gentleman. The

method is still a secret, and said to be essentially different from that of M. Ganai just described.

On the 11th November, glass tubes were exhibited to the Academy, filled with diamond dust, or (to speak more accurately) carbon crystallised by art. The different specimens were not obtained by the same method. The chemical properties are the same, but in appearance and hardness they are strikingly different.

One of the tubes contains a very transparent small crystal, whose form is distinctly pyramidal. M. Delatour expects to present to the Academy crystals of four or five lines in diameter.

M. ARRAGO remarked on this occasion, that it would be easy to ascertain the nature of one of the crystals, as its "facettes" were sufficiently large to show the angle of prolongation. He stated also that a person of his acquaintance entertained a hope that the decomposition of carburet of sulphur by the voltaic pile would be successful. The defective conductivity of this substance had hitherto impeded the success of the experiment, but it is confidently expected that this difficulty will be overcome.—*From a Correspondent at Paris.*

INTELLIGENCE.

MONTHLY REPORT OF PREVALENT DISEASES.

DURING the course of the last month pulmonary affections have been frequent, but not marked by any great degree of severity. Many cases of rheumatism have fallen under our notice. We are still unable to detect the true intermittent form of this disease, which we have lately heard so loudly and so confidently laid down as its most usual type. In all the cases we have seen, calomel, opium, and colchicum, and moderate bleeding in the very early stages of the attack, have quickly cut short the disease. We have no confidence in any preparation of bark during the acute stages of rheumatism. When it has run on to a chronic state, the sulphate of quinine is frequently of much service.

Since our last report, peritoneal inflammation, of a low character, has occurred in several instances after easy and natural labours. These attacks have yielded to moderate bleeding in the commencement, and the free employment afterwards of calomel and opium, with occasional purgatives.

In three or four instances of slight paralytic affections, which have happened in old persons of broken-down constitution, much benefit has followed from the exhibition of ammonia and quinine, with, at the same time, local frictions and a mild yet nourishing diet.—Is not bleeding in such cases too indiscriminately had recourse to, from the prevailing belief that every modification of palsy, occurring either in the strong or the weak, indicates a disposition to apoplexy?

Westminster Medical Society. President, J. M. ARNOTT, Esq.—The following resolutions were passed unanimously at a special meeting of the society, held a short time ago.

Moved by Dr. J. SOMERVILLE. Resolved 1st. That it appears, from the

Report presented by the Committee on Anatomy to the House of Commons in the last session of Parliament, that, by the present state of the law, the only bodies which can be legally employed for dissection are those of persons executed for murder; and that even the possession of a body obtained in any other way is a misdemeanour.

Moved by Dr. WEBSTER. Resolved 2d. That this state of the law is injurious to students, teachers, and practitioners, in every department of medical and surgical science; and, in the opinion of the Committee of the House of Commons, is highly injurious to the public interests also.

Moved by Dr. MILLIGAN. Resolved 3d. That the measures recommended in the Report are, the repeal of any existing law which would subject to penalties those concerned in carrying the proposed plan into execution: the passing of an enactment permissive, but not mandatory, declaring that it shall not be illegal for the governors of workhouses, and other public institutions, to give up to dissection the bodies of those who die, without being claimed by their friends within a certain time: and the repeal of the clause of the Act of George II. which directs that the bodies of murderers shall be given up to be dissected.

Moved by J. R. BENNETT, Esq. Resolved 4th. That it appears to this Society that petitions should be presented to both Houses of Parliament, praying for some legislative measure which may give effect to the recommendations contained in the Report presented to the House of Commons in the last session.

Moved by G. JEWEL, Esq. Resolved 5th. That the committee be requested to draw up petitions founded on the preceding resolutions.

In compliance with the above resolutions, the following petition has been drawn up, and is now in course of signature by members. At an early day, it will be presented to the Commons by Mr. WARBURTON; that to the Lords, by the Marquis of LANSDOWN.

To the Honourable the Commons, &c.

The Petition of the undersigned Physicians, Surgeons, and Students of Medicine, Members of the Westminster Medical Society,

Humbly sheweth, That, by the Report of the Select Committee of your Honourable House, appointed to inquire into the manner of obtaining subjects for dissection in the schools of anatomy, and the laws affecting the persons employed in obtaining and dissecting of bodies, bearing date the 22d day of July, 1828; the said Select Committee report, that the bodies of persons executed for murder are the only subjects which can legally be anatomised; and that the possession of a body for the purpose of dissection, obtained in any other manner, renders the possessor liable to an indictment for a misdemeanour; and the said Committee further report, that such a state of the law is, in their opinion, injurious to students, teachers, and practitioners, in every department of medical and surgical science, and highly prejudicial to the public interest.

Your petitioners therefore humbly pray your Honourable House, that the existing laws which direct the bodies of murderers to be anatomised, and which make the possession of a body for the purpose of dissection, obtained in any other manner, a misdemeanour, may be repealed. And that your Honourable House may be pleased to pass an enactment, enabling the governors of workhouses, and the directors of other public institutions, to dispose of,

for the purpose of dissection, the bodies of those dying in workhouses or public institutions, such bodies not having been claimed within a limited time by any relative, or otherwise, as to your Honourable House may seem meet.

And your petitioners will ever pray.

Machanic's Institution.—On the 1st February, 1829, Dr. JOSEPH READE, author of "Experimental Outlines for a new Theory of Vision, Light, and Colours, will commence a course of lectures on Optics.

A patent has lately been granted to P. DERBISHIRE, of Ely place, Holborn, for a certain medicine or embrocation to prevent or alleviate seasickness, which may be usefully applied to other maladies.

We have heard of some cases in which this remedy is said to have been successful in preventing seasickness, in persons who had before always suffered very severely from it.—EDITORS.

Mr. GREEN, of Great Marlborough street, has lately published a very useful Chart of the Diseases of the Skin. The arrangement of the various diseases is in accordance with that of RAYER. The effects of the fumigating baths, as observed by Mr. Green during his very extensive experience, are stated in the last column.

Mr. BRANSBY COOPER, having been informed that Mr. LAMBERT asserted, at the last meeting of the Westminster Medical Society, that he had been employed to correct Mr. Cooper's work on the Ligaments, has requested us to state that he never employed Mr. Lambert for any such purpose; nor does he believe that that individual ever saw a line of the work until it was published.—*Medical Gazette*, Jan. 10th.

Mr. JAMES LAMBERT, reporter for the *Lancet*, has recently been expelled from the Westminster Medical Society, and also from the London Medical Society, by large majorities. Mr. Lambert is the person who wrote the libellous account of the operation for lithotomy which was performed by Mr. B. Cooper. A correct statement of this operation is given in the Hospital Reports of our present Number.

A very useful volume for the medical student has lately been published in Edinburgh, under the title of "The Medical Calendar, or Student's Guide." It contains a brief but very correct view of the various courses of medical and scientific instruction in the principal recognised schools of the United Kingdom and of Paris; and also an account of the rules to be observed for obtaining academical honours or professional diplomas, or for entering the public service. We would recommend this work to the attention of those who are commencing their professional education, either at home or in foreign countries.

Dr. HARINGTON has addressed a letter to a contemporary Journal, stating that he has for some time withdrawn himself from the Western Hospital, and that he has no further connexion whatever with that institution.

Mr. CÆSAR HAWKINS has been appointed assistant surgeon of St. George's Hospital.

OBITUARY.

WE have to announce, with the deepest regret, the death of Dr. W. H. WOLLASTON, which took place on the 22d December. As a man of general scientific acquirements, he held the very highest rank. His great ability was admitted not only by the learned of this country, but throughout Europe his name was always mentioned with admiration, and his opinions with confidence. His works are too well known, and too justly appreciated, to demand our formal praise.

Died lately, at Gibraltar, Dr. HENNEN, Inspector of Army Hospitals. From the first dawning of his professional career to the last hour of his existence, he gave very many proofs of the ardent and honourable zeal with which he cultivated every pursuit that could be usefully employed in the different responsible situations in which he was placed. Dr. Hennen received from the Emperor of Russia a valuable diamond ring, as a testimony of his Majesty's gratitude for the important services he had conferred upon the armies of modern Europe. We understand Dr. H. was lately occupied in preparing for publication a new edition of his work on Military Surgery.

We have still another melancholy record to place upon our pages, which will be deeply felt both by the profession and society in general. THOMAS ROSE, Esq. aged forty-five, A.M. surgeon of St. George's Hospital, and late surgeon of the Coldstream Regiment of Foot Guards, departed this life at his house in Park place, on the 21st of January. The heavy domestic affliction with which Mr. Rose had been recently visited, laid the foundation for the disease which speedily removed him from all the turmoil of this world. He was known to be most ardently attached to his domestic circle; and the unexpected loss of three children, who fell victims to whooping-cough at Boulogne, and who were all (we believe) buried in the same grave on the same day, was too severe a blow to be borne by the ordinary philosophy of human nature. Mr. Rose's health sank rapidly under the poignant anguish of his mind, and it soon became too evident that he never would recover the shock.

Eulogies upon the dead are so indiscriminately, and therefore so injudiciously lavished, that but little reliance may sometimes be placed on the praises which truth demands. In bestowing the warmest panegyric upon the professional and private character of Mr. Rose, we shall not, however, be accused of exaggerating his merit. By all who knew him he was acknowledged to be able as a surgeon, and most scrupulously honourable and kindhearted as a man.

MONTHLY LIST OF MEDICAL BOOKS.

[Medical Works cannot be entered on this List except a copy be sent for the purpose; the titles of Books having frequently been transmitted to us, as published, which have not appeared for weeks, or even months, after.]

On Aneurism, and its Cure by a new Operation. Dedicated, by permission, to the King. By JAMES WARDROP, Surgeon to his Majesty.—London: 1828. 8vo. pp. 117. Plates.

Transactions of the Medical and Physical Society of Calcutta. Vol. III. —Calcutta, 1827. 8vo. pp. 454.

An Essay on the Mechanism of Parturition. From the German of C. F. NÄGELÉ, Professor of Midwifery at Heidelberg. By EDWARD RIGBY, M.D.—12mo. pp. 166.

Napoleon à St. Hélène. Opinion d'un Medecin sur la Maladie de l'Empereur Napoleon, et sur la Cause de sa Mort. Par J. HERREAU.—Paris, 1829. 8vo. pp. 228.

A Letter to the Right Hon. the Secretary of State, containing Remarks on the Anatomical Report, and pointing out the Means by which the Science of Anatomy may be cultivated with advantage and safety to the Public. By G. J. GUTHRIE, F.R.S. Professor of Anatomy and Surgery to the Royal College of Surgeons, &c.—8vo. pp. 37.

Origin of Life and Cause of Diseases, clearly explained. By JAMES MORISON, the Hygeist.—Pp. 16.

METEOROLOGICAL JOURNAL,

By Messrs. HARRIS and Co. Mathematical Instrument Makers, 50, High Holborn.

December	Rain gauge.	Moon.	Thermom.			Barometer.		De Lue's Hygrom.		Winds.		Atmospheric Variations.		
			9 A.M.	MAX.	MIN.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 a.m.	2 p.m.	10 p.m.
			9 A.M.	MAX.	MIN.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 a.m.	2 p.m.	10 p.m.
20			50	55	50	29.86	29.91	65	65	NW	NW	Fine	Fine	Fine
21			53	55	50	.93	.93	66	64	WNW	W	—	—	—
22			52	56	50	.94	.94	66	65	NW	WNW	—	—	—
23			52	57	45	.92	.96	66	66	NW	WNW	Sm. Ra.	Cloudy	Rain
24			45	52	41	.55	.40	98	69	WNW	W	Fo	Rain	—
25	.16		43	46	36	.35	.35	69	65	WNW	WNW	—	Cloudy	—
26			38	45	36	.50	.47	64	65	WNW	W	Fine	—	—
27			38	45	36	.56	.78	68	65	SE	SE	—	—	Fine
28			37	42	40	.69	.90	68	70	SE	SW	Rain	Rain	Cloudy
29			40	41	36	30.25	30.27	68	70	SW	SW	Fog	Cloudy	Foggy
30			37	42	38	.26	.16	69	67	SW	SW	—	—	—
31	.09		40	48	38	29.97	29.96	66	68	SSW	WSW	—	Sleet	Rain
Jan. 1			40	46	37	.76	.70	68	64	W	NW	Fine	Cloudy	Fine
2			40	42	36	.78	.86	62	65	NW	NW	Fine	Fine	—
3			38	42	38	.80	.84	63	64	NW	NW	Sleet	Fine	Fine
4			40	42	34	.47	.49	62	65	NW	N	Fine	—	—
5			35	38	29	.60	.75	64	67	N	N	—	—	Snow
6			30	35	29	.88	.88	67	69	NNE	N	Snow	Fine	Sleet
7			35	37	30	.90	.86	67	64	NE	NE	Foggy	—	Fine
8			32	35	31	.80	.76	67	65	NE	NNE	Cloudy	Cloudy	Snow
9			33	36	33	.69	.56	67	66	N	N	Foggy	Fine	Fine
10			34	38	30	.51	.59	66	67	NNE	NE	—	—	—
11			31	37	30	.80	.66	64	65	E	E	—	—	—
12			36	38	32	.87	.88	67	66	NE	NE	Foggy	Sleet	Cloudy
13			34	38	33	.97	.98	65	63	E	NE	Cloudy	Cloudy	Cloudy
14			34	37	34	.95	.98	64	67	NNE	NE	Fine	Fine	Cloudy
15			35	38	31	.82	.68	67	66	ENE	NE	Foggy	Cloudy	Cloudy
16			39	34	27	.52	.54	65	66	ENE	NE	Foggy	Fine	Fine
17			29	30	25	.68	.77	67	64	ENE	ENE	—	—	—
18			26	30	25	.80	.90	66	64	E	E	Foggy	Foggy	Fine
19			26	30	25	30.01	30.01	65	66	E	NE	Fog	—	—

The quantity of Rain fallen in the month of December, was 1 inch and 64.100ths.

NOTICES.

Communications have been received from Dr. SPEER, Mr. CHINNOCK and Mr. G. T. BURNETT.

In answer to two letters which have been addressed to them, the Editors beg to reply, that they have no objection to publish Original Papers anonymously; but the names of the Authors must always be confided to them.

If Dr. M., of Exeter, will forward a copy of his work to the Publisher's, the Editors will give it early attention. They have communicated with Dr. MACLEOD upon the subject, but he does not remember ever to have received the Dissertation.

ERRATUM in our last Number, p. 69.—In the quotation from Dr. Burrows, p. 581, the last line but one, for "there are," read "these are." Without this alteration, the subsequent comment of the reviewer is scarcely intelligible.

*For the Bodleian Library
~~Advocate Library~~*

THE LONDON
Medical and Physical Journal.

NO. 361, VOL. LXI.]

MARCH, 1829.

[NO. 33, *New Series*.]

For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work, to which the Faculty, in Europe and America, were under deeper obligations than to the *Medical and Physical Journal of London*, now forming a long, but an invaluable series.—RUSH.

ORIGINAL PAPERS, AND CASES,
OBTAINED FROM PUBLIC INSTITUTIONS AND OTHER
AUTHENTIC SOURCES.

PHLEBITIS.

Observations on Venous Inflammation; with the Details of a Fatal Case of Phlebitis, occurring after Venesection. By HENRY S. CHINNOCK, Member of the Royal College of Surgeons, and Consulting Surgeon-Accoucheur to the Westminster Lying-in Hospital.

FEELING it to be the duty of every surgeon, at this particular moment, to submit all the information he possesses on the subject of inflamed veins to the notice of the profession, I have drawn up the following particulars of an interesting case that fell under my notice some time since; together with a few remarks.

The attention of the profession cannot have been otherwise than excited to an intense degree, by the highly interesting paper written on this subject by Mr. ARNOTT, which has lately been read before the Medical and Chirurgical Society, as well as by the valuable remarks made by the members during the discussions consequent on its introduction.

It is unnecessary, I conceive, to enter into a detail of Mr. Arnott's opinions, and the extent to which he carries his views on this subject, further than in the application of this case to his theory; inasmuch as every one of your readers have had equal opportunities with myself of collecting them from the report of the proceedings of the

Society of that night, as published in this Journal for the month of December last.

The case I refer to is that of a labouring man, of a full, robust, plethoric habit, between thirty and forty years of age. He had been bled, he stated, two or three days previously, at St. George's Hospital, in consequence of a fall from a ladder, but had not been prevented from attending to his ordinary occupation during the few days subsequent to the operation.

On my first interview with him, he did not complain of any urgent symptom; neither did I observe the slightest reason for further medical treatment than the simple exhibition of a calomel and saline purge. His principal complaint was a feeling of heaviness about the head, with the very general expression that he "felt ill," excessively "weak and stiff," and some sense of chilliness; sensations he conceived to be wholly proceeding from the accident above referred to.

The same general complaint was made, and the same indefinite set of symptoms continued, for the two succeeding days, with the addition only, on the evening of the second, of more than ordinary heat and dryness of skin, some additional sharpness and activity in the pulse, an appearance of restlessness and irritability, together with a more decided sense of chilliness, &c.

Although this state of things made me more anxious in my examinations, and the character and the peculiar sharpness of the pulse induced me to suspect the existence of inflammatory action, I could not obtain from my patient's account any further clue to the mischief, or any more satisfactory statement than on any of the previous days. He felt no local pain; neither did he on this occasion complain of any urgent or distressing symptom.

It appearing to me to be a genuine case of synocha, I bled him largely; ordered a calomel and saline purgative, with tartarized antimony, to be again exhibited; and the fever diet to be rigidly adhered to.

I found my patient on the next morning in a most excited condition; the feverish symptoms were much higher, the skin was excessively hot and dry, the countenance flushed, tongue coated with a thick white fur, pulse hard and full. He complained of severe headach; his respiration was somewhat oppressed and painful, but the sensorium was little affected.

I still considered it a case of common inflammatory fever, unaccompanied by any visceral or cerebral affection; inasmuch as, in answer to my most minute inquiries and examinations, there was no additional complaint or pain; no further local affection than on any of the previous days, only a general aggravation of the same set of symptoms. I immediately determined on the further abstraction of blood; and, on proceeding to perform the operation, I attempted to lift and examine the arm he had been, six days previously, bled in at the hospital, prior to the usual application of the

bandage, (I bled him in the left arm on the day before,) when there was an involuntary shudder on the part of the poor fellow, accompanied with an expressed wish that I would again open a vein in the left arm; as, ever since he was bled at the hospital, the right had felt "stiff and uncomfortable," and within the last two days so tender that he could scarcely move it, or bear it touched, without considerable pain and inconvenience.

I naturally inquired why he had not previously mentioned it, especially as I had so particularly examined him for local symptoms or pain. He excused himself by observing, that he considered it was usual that the arm should feel painful and uncomfortable subsequent to venesection, and with that impression had moved it but little; he consequently felt it only comparatively inconvenient, and should not now have mentioned it but for the sudden and acute "twinge" produced on my disturbing it.

On examining the arm, I found the median cephalic was the vein that had been opened. The orifice had apparently partially united by the first intention, but the wound was now disposed to separate, with everted edges; there was a blush of erysipelatous inflammation, and considerable puffiness, surrounding the orifice, and an irritable condition of the wound itself. There was, as well, much general tumefaction of the arm and shoulder, extending round the axillary region. It had an œdematous feeling to the touch, but left no pitting. He complained of a sense of "stiffness" and "soreness," similar to that experienced in erysipelas; the pain on pressing it was exquisitely acute.

My attention was not particularly directed to the course of the vein, or any pathognomonic symptom of phlebitis, on this occasion; neither do I conceive I could have obtained any satisfactory diagnostic while there was so much general mischief, and such an extent of tumefaction. I, without further delay or examination, bled him again in the left arm, ordered twenty leeches to be instantly applied to the part, a fomentation of poppies to be freely used, and the limb to be completely enveloped in a linseed poultice. Saline and antimonial medicines were prescribed, with a calomel and opium pill at night, to be followed by a brisk aperient on the succeeding morning.

On my visit next day, I found he was much less heated: he had slept tolerably well in the course of the night, and expressed himself much relieved of the local symptoms by the bleeding, leeches, and fomentations, and generally stated himself more composed and comfortable. His tongue was equally loaded as yesterday, and the coating of a darker colour, although the bowels had been freely and very satisfactorily relieved, with this exception, that the feces discharged were not natural; they were dark and fetid. Urine very high coloured. The skin was still dry, but not so hot. His countenance was anxious, and he appeared generally irritable; his intellectual faculties were more disturbed; the pulse was 120, sharp and small. He complained of a painful

throbbing sensation in the axilla, and a stronger sense of tension around the shoulder and the boundaries of the pectoral muscles; and, on examination, there was, in the whole neighbourhood of the armpit, evidently increased tumefaction and sensibility. He had complained of chilliness about three hours previously, amounting almost to a complete rigor. I ordered twelve more leeches to be applied, the poultice and fomentation to be continued, and a mixture composed of camphor julep, tincture of henbane, and acetate of ammonia, to be exhibited; and the opiate at bedtime to be repeated.

There was something in the character of the pulse observable on this visit, that indicated the necessity of still further depletion; but the anxious appearance of the countenance, the state of the tongue, skin, and sensorium, giving a typhoid character to the type of fever, and there being evident signs of suppuration in the axilla, I was induced to defer the adoption of very active measures.

On the next (the fifth) morning, there were more evident symptoms of distress: he had passed a restless, indeed, as he stated, a "miserable" night; the leeches had produced but very trifling relief. The only comfort he experienced was in the use of the fomentation. There was a much greater degree of irritability than on any previous occasion. He had two distinct shivering fits in the night, and occasional perspiration. The arm was more painful and distressing than ever; the pain on the shoulder and armpit he described as agonizing. There was still considerable general tumefaction; the axillary region, especially, was much more enlarged than yesterday. The swelling was of a peculiar nature: it was very diffuse, very extensive; it had no particular prominence or depending part, but bore a general tympanitic character. On pressing it, it did not pit; it gave a feeling of elasticity. There was a sense of fluctuation, a sort of undulating character, that indicated the existence of fluid. After a very careful examination, being convinced of the presence of inflammatory secretion, I made a free incision with a common sharp-pointed bistoury, which gave exit to a great quantity of healthy pus. Great comfort and relief was instantly experienced; the tension and pain was immediately relieved; and, soon after the application of a poultice, he fell into a sweet composed sleep.—Some beef-tea, with arrowroot, farinaceous puddings, &c. were allowed, and the same medicines continued.

My attendance was requested very early on the succeeding day, when I found my patient much worse. He awoke from the sleep relieved, but had gradually been getting worse. There was much additional excitement; the pulse was full, sharp, and rapid; the tongue white, the countenance flushed; and there was every symptom present of fresh inflammatory action. On examining the arm, I found the discharge still continuing from the axilla; tumefaction very trifling. He complained of acute "shooting pains".

running down the arm, from the shoulder to the forearm. On examining it, I found the limb much smaller: that is to say, the morbid puffiness and tumefaction much less; the whole course of the cephalic vein was marked with a reddened line of inflammation, and so hardened as to be distinctly felt like a cord under the skin, and almost perceptibly forming the line of distinction between the clavicular portion of the deltoid and pectoralis major muscles. Great pain was experienced on pressure in the course of the vein; there was a slight weeping of pus from the orifice of the vein, increased by pressing downwards. The pain was now confined to the course of the vein; he could move his arm more easily than before, and was enabled to turn in bed, and breathe with less suffering and inconvenience. His spirits began to sink; he expressed himself worn out by the disease and remedies, and seemed desirous that nature should have her course, rather than submit to further medical treatment. He was, however, induced to submit to the application of eighteen leeches to the course of the vein, and the continuance of the fomentation and poultice. Saline medicines, with henbane and opiates, composed the principal items in the prescriptions. Whey, thin arrowroot, &c. were directed as his principal articles of diet; and perfect quiet was strictly enjoined.

In the evening of this day I again saw him: the leeches had produced great relief in the local symptoms; the line of inflammation was much less distinct; the vein was not so hard, neither was there any thing like the degree of sensibility complained of in the morning; the pulse was very rapid and *sharp*; his intellect was much disturbed; he appeared very anxious and irritable, and not at all disposed to sleep.—I ordered a full dose of opium, and directed the poultice and fomentation to be continued.

The next (the seventh) day, typhoid symptoms were very evident. He had been excessively restless during the night, occasionally wandering in his imagination, but not decidedly delirious. The skin was very dry, the mouth parched, the countenance excessively anxious, urine very scanty, pulse very rapid, and breathing hurried. The integuments in the axilla were very loose and flabby, had a livid appearance, especially in the neighbourhood of the opening. A discharge of thin pus, of a sanious character, with a fetid odour, was exuding from it, and a secretion of the same description weeping from the orifice in the bend of the arm. The red line of inflammation had completely disappeared, the vein was much softer, and its course scarcely perceptible. He again complained of oppression in the chest, in contradistinction to that of painful respiration before complained of. He had a sense of fulness in the right side, and a difficulty in "drawing over a breath:" when he wanted to inspire, he was obliged, he said, to "stop short half way," otherwise he feared he should be "choked." It produced no pain, as it did three or four days since. He had no cough, but constantly felt a choking sensation.

He was unable to lie completely in a horizontal position, and was consequently raised to a semierect posture. He now directed my attention to the opposite axilla, where he had sensibly felt pulsation and a sense of "fulness and stiffness," similar to that at first occurring in the right. There was a slight feeling and appearance of tumefaction, with some tenderness and perceptible increase of heat.

Poultices and fomentations were still resorted to as the only means of relief for the local affection. Ammonia, aromatic confection, and opium, were the medicines. For diet, he was ordered every description of light nutritious broth, with wine.

He rapidly sank from this day. The typhoid symptoms became more urgent; he passed miserable nights; was at last delirious; his skin became as dry as parchment, and his tongue like a nutmeg-grater; he had subsultus tendinum; the pulse was fluttering, and scarcely to be counted. The wound of the arm and axilla assumed a completely livid aspect; the discharge was much diminished and ichorous. The left axilla was during this time a great source of annoyance to him; the tumefaction had increased, there was evident fluctuation; but he would not submit to the use of the lancet; and on the last day of his life the integuments assumed the same disposition to gangrene as in the opposite limb. He during this time drank his wine and porter (which he was of course liberally allowed,) greedily, and resorted to his stimulating medicines with great avidity; and at length died in a complete state of exhaustion, on the evening of the ninth day of my attendance.

On the succeeding morning I examined the body. The arm first attracted my attention. The orifice opened distinctly into the vein. On introducing air through a blowpipe, I found the vein completely pervious. There was much induration, thickening, and adhesion of the integuments with the subjacent fascia and surrounding parts, so that it was only with considerable care and difficulty I was enabled to examine the whole course of the vein. The median-cephalic and cephalic veins were double their natural size; the coats of the vein were considerably thickened; the external tunic, where it was distinctly detached from the neighbouring parts, was much redder and more vascular than natural, putting on a completely arborescent appearance, produced (I should conceive) by an injected state and increased size of the vasa vasorum. There was not the slightest appearance of blood in the cavity of the vessel: it was partially filled with purulent matter, in patches like clotted cream; its inner coat was very red, and much thickened; its general appearance was that of an artery rather than a vein. On tracing it towards its termination in the axillary vein, the same appearances were observed, till within about half an inch of its entrance into the principal trunk. The median-basilic and the basilic as well showed feeble traces of inflammatory action. There was in the interstices of the deltoid, pectoralis major and minor, coraco-brachialis, and brachialis

internus muscles, a deposition of dark-coloured semifluid matter. The fibres of the pectoralis major, subscapularis, and other muscles, constituting the boundaries of the axillary space, were gangrenous. The whole of the adjoining cellular tissue was in a sloughing condition, and injected with, or rather floating in, matter of an ichorous and sanious character. There was no trace of disease further than an inch below the orifice, excepting an injected state and tumefied condition of the cellular tissue; the veins were perfectly healthy, and not adherent to the neighbouring parts.

I found in the left axilla from an ounce to an ounce and a half of thin grumous fluid. The surrounding parts were perfectly healthy, except those immediately forming the boundaries of the sac, which were almost in a sloughing condition.

I pursued my examination to the chest, to account for the minor degree of oppression complained of by the patient just prior to death, as well as the pain and difficulty of respiration in the commencement of the disease;* when, much to my surprise, I found from four to six ounces of semipurulent matter floating in the right cavity of the chest. There was very trifling adhesion of the pleura of the right side, but no further trace of inflammatory action. The right lung was in a complete state of *engorgement*; on cutting into it, a yellow mucilaginous fluid first escaped, and subsequently dark grumous blood. The structure of the lung was not materially altered. There was not the slightest vestige of disease in the opposite side of the chest; no more fluid than natural. The heart and pericardium healthy.

The liver, brain, and abdominal viscera were not examined.

I have been thus particular in the details of this case, as far as my memory, assisted with the few notes I took of the prominent features of it, would allow me, inasmuch as I think it one of a most interesting character to the profession. It was, without exception, the most active, the most alarming instance of this species of disease I ever met with. The case was evidently one of simple excitement, simple inflammatory fever, consequent on that general constitutional disturbance which usually attends any violent or accidental shock of the nervous or circulatory system. The local affection, I conceive, was not produced by a foul lancet, or the introduction of morbid matter, but was simple, common

* The painful and difficult respiration that distressed the man so much during the fourth and fifth days of my attendance, can, I think, be sufficiently accounted for by the inflammation extending to the cellular tissue, in connexion with, and thus implicating the action of the pectoralis major, minor, serratus anticus, and other muscles connected to the ribs; there being no signs whatever during life, nor (as will be seen by the account of the dissection) after death, of the existence of inflammation within the chest. The state of oppression felt on the two last days of his life was evidently the effect of purulent deposition.

inflammation, occurring in a habit predisposed to diseased action, such as is constantly happening from wounds or injuries of any part or any tissue, in a deranged or diseased constitution, or during febrile excitement. The cellular tissue of the arm was the part first inflamed: the vein was most certainly not, I think, at all implicated in the mischief at the first development of the local symptoms; neither was it, I conceive, in the least affected till the inflammation had nearly run its course, indeed not till the commencement of suppuration, till the actual secretion of pus. Very soon after the first rigor; and almost immediately after the first exudation of inflammatory secretion from the orifice, we had symptoms of reaction. On the approach of fresh inflammation, very shortly, indeed, after these symptoms, my attention was directed to the vein: then it was I observed its hardened condition, the evident red streak of inflammation, as I have before remarked as forming the line between the two muscles; then it was the whole train of symptoms accompanying phlebitis made their appearance in succession, marking it as a genuine case of that disease. In addition to the local symptoms, the rapid change from a state of excitement to that of exhaustion: in short, the almost instant approach of typhoid fever, the deposition of matter in the opposite axilla, and the loaded, the oppressed condition of the lung.

Whether the inflammatory effusion from the subjacent tissue entered the orifice of the vein, and immediately mixing with the current of blood, was conveyed to the heart through the axillary, subclavian, and cava veins; whether it insinuated itself (if I may use the expression) into the tube, and thus excited inflammation of the internal tunic of that vessel, and the consequent effusion of lymph thus transmitted through the venous canal to the system; or whether, in accordance with Mr. Hunter's expressed opinion on this point, "that in all cases of violent inflammation of the cellular membrane, whether spontaneous or in consequence of accident, as in compound fracture, or surgical operation, as in the removal of an extremity, that the coats of the larger veins passing through the inflamed part become also considerably inflamed, and that their inner surfaces take on the adhesive, suppurative, and ulcerative inflammations."* That the vein thus became

* Mr. Hunter further observes "it to be so common a case, that he has hardly ever seen an instance of suppuration in any part furnished with large veins where these appearances are not evident after death." He also states "that he has constantly found them in the bodies of those who have died

implicated in the general mischief are, I consider, the only queries as to the immediate cause or origin of the phlebitic inflammation in this case.

I do not consider much time need be occupied in reflection. There were evident symptoms during life of the existence of inflammatory action in the whole course of the vein, and every satisfactory proof of the pre-existence of inflammation in the internal tunic of that vessel at the post-mortem examination; and I think the most plausible rationale is, that such inflammation was produced by the insinuation of inflammatory secretion from the adjoining cellular membrane; that the effusion of lymph was the consequence, and an admixture of pus with the circulating fluid thus produced the distressing train of secondary putrescent symptoms, and the consequent loss of the patient.

There cannot, I conceive, be a single doubt that the amalgamation of pus with the blood was the immediate cause of the poor fellow's death; otherwise, I would ask how could purulent matter have found its way into the opposite axilla, where there was no evidence of prior disease, or purulent depôts formed in the lung and in the cavity of the chest. If the vein had not thus been unfortunately implicated in the diseased action in the progress of the cellular inflammation, I am fully convinced the man would have recovered: the disease had evidently yielded to remedies, the constitution had stamina to support the loss of pus, the discharge was at first perfectly healthy, in short, every favorable symptom we could reasonably expect was present, till the development of the phlebitic affection. The constitution had necessarily been subject to extensive depletion to relieve the cellular inflammation, which was of itself of the most virulent and the most active character that ever fell under my notice, and the system could consequently ill afford submission to that mode of treatment likely to stop the progress of this fresh attack. If it had made its appearance under almost any other circumstances, I certainly should have hoped to derive much benefit from early depletion; but, happening as it did, there did not appear to me to be the slightest grounds for a favorable prognosis. The remarkable state of sinking, and the rapid approach of putrescent symptoms and death, after the

from amputations, compound fractures, and mortifications." (See "Observations on Inflammation of the Internal Coats of Veins," by John Hunter, Esq. F.R.S. Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, p. 19. 1793.)

active phlebitic inflammation, prove clearly to my mind that nothing can be possibly done to save life after pus is thus conveyed into the system; after the inflammation once terminates in effusion.

The result of this case enables me to bear Mr. Arnott out, and to strengthen his views on the pathology of this disease. It may be added to the ten cases he related to prove the truth of his proposition, that "there is no evidence of the inflammation of the vein extending to the heart," and further increase the value of his aphorism, "that there is no direct relation between the degree of danger and the extent of vein inflamed," inasmuch as there was not in this instance the slightest trace of inflammation beyond the junction of the cephalic with the axillary, or much less in the subclavian or cava veins: and most decidedly do I coincide with him, not only reasoning from this individual case, but drawing my deductions from other species of disease, in his general conclusion, "that abscesses and inflammations which take place in remote situations after injuries of the extremities, of the head, or after parturition, are dependent upon the existence of phlebitis in the part *originally* affected; that the diseased action does not consist in mere metastasis, or change of situation in absorbed matter, but that the secondary local affections derive their peculiar characters from a change induced in the blood, by its admixture with the pus or other inflammatory secretions from the vein." The great similarity in the constitutional disturbance, the febrile excitement, and the approach of the disease in this case, to the train of symptoms that occurred in two well-marked cases of inflamed cellular tissue, caused by the introduction of morbid matter, enables me, as well as Mr. Arnott, to assert that there is a most striking resemblance between the symptoms of inflamed veins and those attending wounds received during dissection, or the introduction of morbid poison by puncture.

In reference to phlebitis generally, I cannot avoid looking back and adopting the humoral pathology. In addition to the facts above stated, and Mr. Arnott's high opinion on this subject, I refer to the well-known circumstance of the blood of those patients who have died of phlebitis being so constantly observed, after death, to be almost in a fluid condition; a fact, by the by, I am not aware that Mr. A. has referred to. I do then consider we may indeed be very fully justified in applying the humoral doctrine to this species of disease.

Taking up this view of the question, I see no chance of saving the life of a patient suffering from phlebitis, but by *early* depletion. If the inflammatory action of the disease be not arrested *in limine*, and the purulent effusion prevented, there is little chance of a favorable issue; and as the vitiation of the fluids is a secondary process, and evidently the cause of the great prostration in the powers of life, our object must clearly be to stop the course of the inflammation to such a termination. To obtain this end, general and topical bloodletting must be resorted to as our sheet-anchor. Topical bleeding cannot possibly be carried to too great an extent: I would completely cover the course of the vein inflamed with leeches, but would not recommend the too free abstraction of blood by venesection. I conceive we ought to be very guarded, very cautious, in drawing it from the general system: It can seldom be borne, unless in the very earliest stages.

Where the venous is not complicated with extensive inflammation of adjoining cellular tissue, I think much good may be derived by the application of cold above the immediate seat of disease; and, where the limb will admit of it, I think Mr. Hunter's remedy is very plausible, that of compressing the vessel, to promote the deposition of coagulum, the adhesion of the sides of the vessel, and consequently prevent the passage of the depraved fluid to the heart.

Michael's Place, Brompton.

DISEASES ON BOARD THE ESSEX.

A brief Account of the Diseases that appeared on board the Essex Prison Hulk, during the Years 1825, 26, and 27. By JOHN SPEER, M.D. Surgeon R.N. and Medical Superintendent, Essex; late Surgeon of the Castleknock Dispensary.

THE Irish government having determined to station a hulk at Kingstown, considering it would be beneficial to the public, by saving the heavy expense of demurrage, as well as other expenses attendant on the shipment of prisoners for New South Wales, they accordingly stationed the Essex there, and commenced receiving prisoners in the year 1825.

The hulk became suddenly crowded, which produced disease amongst the prisoners. Catarrhal affections first made their appearance, which, generally speaking, yielded to gentle aperients, diaphoretics, and expectorants. Slight ulcers became exceedingly common, particularly on the lower extremities, chiefly created by the irons, and not

unfrequently on purpose, in order to get released from their weight. The ulcers yielded, in general, to simple dressings with sulphate of copper; some to poultices; and occasionally adhesive straps were had recourse to, after the plan of Mr. Baynton. This treatment was combined with mercurial alteratives and aperients, agreeably to Mr. Abernethy's directions, to regulate the digestive organs, which were always disordered: I apprehend, from the want of proper exercise.

During the latter end of spring and beginning of summer, fever made its appearance among the prisoners. At the commencement, the disease was ushered in by a slight shivering or rigor, or probably it did not amount to either, but merely a chilliness and loss of appetite; this was succeeded by some increased heat, thirst, and headach, with a pulse not more than ninety; the bowels confined. If these symptoms were attended to at their commencement, and relief administered, the disease was in general checked or mitigated. In the cold stage, a gentle emetic very often restored reaction, and produced diaphoresis; and if afterwards followed up by a mercurial purgative and the saline effervescing draught, a crisis in eight or ten days was the result; after which, bark with wine, and a more generous diet, became necessary. If the fever advanced, the symptoms became more severe, and violent determinations or congestion of blood took place in different organs, during the reactive stage. Not unfrequently the patient became affected with violent pain in the head, throbbing of the temples, suffusion of the eyes, and constipation of the bowels. These symptoms were generally relieved by local bloodletting, shaving the head, cold applications, and mercurial purgatives. In a few cases general bloodletting was had recourse to, but the debility became so great, with only temporary relief of the local pain, that very often the application of leeches afterwards was absolutely necessary. This rendered the disease more formidable and difficult to treat, so that latterly I abandoned the practice of general bloodletting, and found much more success after local bloodletting, cold applications, and purgatives; for I believe the lancet cannot be used with that degree of freedom in the diseases of prisoners, as in those of soldiers and sailors.

It frequently occurred that petechiæ appeared, and I think I have observed it more frequently after general bloodletting. Where this appearance was unaccompanied with local congestion in the brain, or other internal viscera, the good effects of bark, wine, and the mineral acids, were

very striking, and often prevented a slow fever of some weeks' duration. Notwithstanding the care that was taken to administer relief at the first onset of the disease, several cases appeared marked by very malignant symptoms, such as delirium, tongue and teeth covered with a brown crust, petechiæ, and involuntary discharges. These were treated according to circumstances: where local congestion existed, leeching and cupping were had recourse to; where the biliary and intestinal discharges were morbid, mercurial and saline purgatives were administered, with antimonials and effervescing draughts; and where the debility became very great, with subsultus tendinum, involuntary discharges, &c., wine, opium, camphor, and blisters were prescribed.

In the end of July, the greater part of the prisoners were shipped, leaving a few cases of fever.

In August we received 240 prisoners, and in a few weeks dysentery appeared: the insidious manner in which it attacked the patients induced me to consider it nothing more than a slight bowel complaint, and in many instances the individuals, for one, two, or three days, had not the slightest appearance of disease, although they were absolutely passing blood. In every case that appeared, with the exception of one or two, feces mixed with blood, or blood mixed with feces or mucus, appeared without any other bad symptom; the pulse being rather smaller than natural, the skin cool, tongue clean, and the appetite but little impaired. These symptoms generally continued some days, and the only inconvenience the patients felt was a frequent and vain desire to go to stool, without voiding any thing, or very scanty feces, which were either brown, pale coloured or whitish, or mixed with blood; but in every instance the complaint appeared to indicate functional disease of the liver. These symptoms were in general succeeded by a reaction of the system, quick pulse, tongue loaded, skin hot and dry, violent tormina and tenesmus, loss of appetite, retention of feces, and nothing passing. In one or two cases the discharges came on with tormina and feverish symptoms, accompanied with a liquid yellow solution of the feces. In no instance could scybalæ be observed, although each patient had his own night-pan. In several cases retention of urine occurred from the violence of the tenesmus, and was generally relieved by the warm bath, stupes, or enemas of starch and opium. A few patients had pain in the testicles, which continued several days, and then gradually subsided by the application of stupes. Long patches of apparently a pseudo-membranous

substance were often evacuated, and appeared to me like a portion of the mucous membrane of the intestine; but I apprehend it was only coagulable lymph thrown out. As the chronic stage of the disease, and recovery, were not protracted beyond the usual time, the treatment which I generally pursued, after separating the sick, as far as circumstances would permit, consisted in the warm bath, mercurial, saline, and oily purgatives, with general and local bloodletting, as the symptoms might require; calomel with antimonial powder, and warm bath at night, followed by castor oil and tincture of rhubarb in the morning. I generally persevered in this for a few days, and, if the disease did not yield, from three to five grains of calomel, with the same of antimonial powder, and half a grain of opium, every third hour, until ptyalism was produced, in general subdued the violence of the symptoms: the stools became feculent, the tormina ceased, tenesmus less severe; and the cure was perfected by small doses of castor oil, with Dovers powder, at night; bitters and astringents, as the fever subsided.

Other cases were treated by small doses of castor oil, with from five to ten drops of tincture of opium at intervals through the day, the warm bath, a starch enema, and Dover's powder at night; which in mild cases succeeded, but was in general more protracted by this line of treatment. Small doses of sulphate of magnesia and infusion of roses, with the warm bath, and Dover's powder at bedtime, succeeded; but the benefit derived from this medicine was particularly observed when the mercurial treatment failed after ptyalism was produced.

In some obstinate cases, after the disease assumed a chronic form, when the pain had subsided, and the common astringents had failed, the acetate of lead, in one-grain doses every third hour, with half a grain of opium, checked the disease. It may not be unworthy of remark, that the changes in the appearance of the feces in those cases where the acetate of lead was used, appeared to me so striking, that I have since doubted whether functional disease of the liver has so powerful an effect in changing the appearance of the alvine discharges; for this remedy so completely altered their appearance, from a white and often a brown colour to that of a light yellow, as to impress me with the idea that simple morbid action of the intestinal canal caused this change in the colour of the alvine discharges.

In those instances where general bloodletting was used, that decided and permanent mitigation of the pain was not

observed, which I have experienced from it in inflammation of the serous membranes. I therefore conclude that inflammation of the mucous membranes are not so easily controlled by general bloodletting as that of the serous tissues.

Early in the month of October dysentery began to decline, and disappeared, when symptoms of scurvy followed. It first appeared by tenderness of the gums, sallow and unhealthy complexion, pain under the scrobiculus cordis, goose skin over the lower extremities, with slight livid patches, hardness and tightness of the lower extremities, stiffness of the joints, particularly the knees; with great despondency. As I had never observed the disease in individuals who lived on fresh diet, I felt somewhat at a loss to account for its appearance, and thought that a diminution of part of their usual proportion of vegetables might have been the cause. Many of them complained in the morning that they had not rested during the night; their breathing had been laborious, with nausea, and pain under the sternum; gums tender. When any individual was found labouring under any of the above symptoms, he was separated, and a liberal scale of diet ordered him.

In endeavouring to discover the cause of the disease, I particularly noticed it in those who had been long confined in gaols, and such as had been often disappointed in obtaining their reprieve: it therefore appeared to me that this disease was produced chiefly by long previous confinement, scanty diet, depressing passions, and crowded apartments.

My treatment at first consisted in an increased quantity of vegetables, which had not the desired effect. The nitrous vinegar, used both externally and internally, proved useless. Oranges and lemons were used with advantage; but the greatest benefit was derived from a liberal allowance of animal food, porter, and soft bread. In two prisoners the fear of transportation kept up the disease, in spite of all remedies; and it was with difficulty I could get their health so far restored as to enable them to undertake the voyage to New South Wales.

The year 1826.—During the spring quarter, a few cases of fever appeared, exhibiting no extraordinary symptoms, and yielding to the former line of treatment. In the summer months, sycosia menti and porrigo prevailed. The former attacked upwards of sixty prisoners: it appeared infectious, and as if communicated by the shaving brush; it was marked by small tumors on the chin and under lip; sometimes the cheeks, face, and scalp had their surface inflamed and

thickened, and in circular clusters, healing occasionally, and followed by others; many of them the size of a pea, filled in the top with a yellow fluid like pus, often discharging this, and suppurating in the course of one night, matting the beard together, which produced a deformed appearance of the patient, and rendered shaving very difficult. In some instances the disease continued six months, alternately healing and breaking out.

My method of treatment, in the inflammatory stage, consisted of leeches, stupes, poultices, with purgatives; and, when the violence of the inflammation was subdued, alteratives, tepid baths, the unguentum nitratis hydrargyri mitius, unguentum picis, and plummer's pill. In most cases the digestive organs were much disordered, and the use of mercurial alteratives, alkalies, and decoction of bark, were all found useful. In the chronic form, the murias hydrarg. in solution proved beneficial. In a variety of instances all these remedies had but little effect, until the patients were removed from their crowded apartments to a purer air; which was generally followed by a speedy cure.

Several cases of porrigo appeared, chiefly confined to the scalp and ears: these yielded, in general, after shaving the head, to tepid ablutions of soap, oatmeal, bran, and warm water. A lotion of the sulphate of zinc, after leeches, was found useful; the hydr. unguentum nitratis was also used.

During the autumn, dysentery prevailed. Nothing particular occurred in the progress of the disease, and the mercurial plan of treatment was adopted with success.

During the year 1827, the hulk was remarked for being healthy, which I attributed to the few prisoners that remained on board; but some extraordinary diseases of the heart appeared, and one case of hypertrophy of the left ventricle occurred in a tailor, and was produced by rheumatic metastasis: the pulsation was visible in all his arteries: he lived many months, and ultimately died suddenly. Such diseases appear particularly prevalent amongst prisoners, and I believe, generally speaking, are occasioned by the depressing passions acting on, and deranging, the general circulation; and, when detected early, they may be alleviated by general and local bloodletting, purgatives, and low diet, and by removing those unfortunate individuals to their final destination.

OIL OF TURPENTINE.

Inquiries respecting the Efficacy of the Oil of Turpentine in the Treatment of Neuralgia, and particularly of Sciatica. By M. MARTINET.

TURPENTINE was employed many ages ago in the treatment of diseases of the nerves. It was used by Galen and Michael Doringius in the form of a plaster; Scultet exhibited it successfully in wounds of the nerves; and Bonnet had even the good fortune to cure a patient of neuralgia by the essential oil of turpentine: but Archibald first brought it into notice as a remedy for sciatica. Having informed Cheyne of the success with which he had employed it in this disease, the latter recommended it to Home, who afterwards published, in his "Experiments and Facts," seven cases in confirmation of the practice. Since that period turpentine has been employed in the above-mentioned diseases by many physicians of different countries: by Helst, Thilenius, and Lentin, in Germany; and by Recamier, De Larroque, Dufour, and Husson, in France.

M. Martinet affirms that little benefit is to be expected from the employment of the oil of turpentine, without due attention to the mode of administering it. It has been exhibited in various proportions, and in very different ways, but he decidedly prefers giving it internally, and in small doses of twenty drops three times daily, in order that its absorption may be the more gradually but thoroughly effected. In larger doses it is liable to occasion diarrhœa, by which its peculiar properties are rendered unavailing. The oil of turpentine, when thus given in scruple doses, and in some proper vehicle, such as honey, syrup, or (what is still better) in magnesia, by which its acrid taste is more completely disguised, produces a strong sensation of heat in the stomach and whole intestinal tube, as well as in the diseased nerve and limb; and sometimes it even occasions a general sweat. In certain individuals it causes a slight colic or a mild diarrhœa, and, more rarely, either a dysuria or an increased flow of urine. But when a drachm of the medicine is taken instead of a scruple, intense colic, diarrhœa, and even vomiting, supervene; yet these formidable signs of irritation, both of the digestive and the urinary organs, generally disappear as soon as the medicine is intermitted. In patients whose stomach and bowels are irritable, a small quantity of opium is found a useful addition to the turpentine, by moderating its stimulating effects on the mucous membrane of those parts.

When the oil of turpentine is administered in the manner and quantity just described, it would seem to be particularly powerful in the removal of sciatica; yet, as M. Martinet suggests, this opinion may have arisen from the greater frequency of this complaint. Be this as it may, its efficacy is also remarkable for curing other species of neuralgia which affect the extremities.

When we attempt to deduce from the phænomena which follow the exhibition of the oil, the mode of its operation, and the cause of its being efficacious, we cannot refer the latter either to its purgative, its diuretic, or its sudorific effects; since this augmentation of the different secretions is neither regular nor constant in its occurrence, and never bears any proportion to the benefit derived by the patient. Besides, we daily see patients who are purged, sweated, &c. much more abundantly by other medicines, without deriving the least benefit; and it was this reflection which led Home to attribute to the oil of turpentine a specific influence over sciatica.

Some physicians have supposed that this medicine produces its sanitary effects on the nervous system by causing a revulsion from the brain to the stomach and skin; but M. Martinet thinks he has clearly shown in his Essay that these effects are almost always missing, even in cases of recovery: and he, therefore, will not admit this explanation to be correct. Others, on the contrary, attribute its efficacy to a revulsion on the nerves which is sympathetic with that of the stomach.

M. Martinet, however, conceives that the stimulation which this oil communicates to the mucous membrane of the stomach is equally produced in the nerves affected, and to a greater or lesser degree, in proportion as they are more or less morbidly affected; which, in his opinion, serves to explain the fact that this medicine is more efficacious in severe and obstinate, than in mild and recent cases of neuralgia. The new modification which is thus effected in the state of the nerve would seem, therefore, to dispose it to resume its natural action, that of health. The heat which the greater proportion of those persons who are either cured or relieved feel in the affected parts, seems to confirm the explanation adopted.

As to the question whether the turpentine acts directly on the nerves by absorption, or exerts its influence over them indirectly and sympathetically, through the medium of the stomach, we are most inclined to adopt the first of these hypotheses: and we found our opinion on the fact that

this oil is nearly always observed to fail in curing those cases of neuralgia where it produces violent purging; which is also true in respect to all other substances employed in this disease, and whose only effect is to irritate the mucous membrane of the stomach and intestines. Its action on the urinary organs would appear to be seldom useful, but, on the contrary, often injurious.

As an external remedy, turpentine seems most beneficial when rubbed in by the hand: it thus produces redness of the surface, without exciting a sensation of heat along the course of the nerve. But the strong and penetrating odour of the oil, when exhibited in this manner, not unfrequently occasions headache.

This medicine is of approved efficacy in all cases of neuralgia affecting the extremities, and particularly in sciatica, when this disease is simple in its character, and evinces no sign that the nerve is either altered in its structure, in a state of inflammation, or compressed by the formation of a contiguous tumor. M. Martinet affirms that, whether the complaint be recent or otherwise, the chance of cure by this remedy is greatest, *cæteris paribus*, when the pain is so intense as to indicate distinctly the course of the nerve, and so obstinate in its nature as to yield to no other treatment whatever. But it is necessary to pay attention to the state of the stomach; for, in case it should not be perfectly sound, the medicine must be immediately intermitted.

Twelve days usually suffice for curing neuralgia when it affects the extremities, and, more commonly, only half that time; and the exhibition of this remedy during a longer period would therefore be injudicious, and detrimental to the organs of digestion.

That the reader may be enabled to judge for himself respecting the correctness of the doctrines above advanced, we shall terminate the present paper by giving a brief analysis of the various observations which M. Martinet has included in his Essay.

Of seventy individuals affected chiefly with sciatica, and other kinds of neuralgia of the extremities, fifty-eight were cured: viz. three by rubbing in the oil, and all the others by taking it internally; ten, two of whom prematurely intermitted the medicine, obtained only temporary relief from its use; and five received no benefit. Of these five, two had diseases of the joints, of which they died a few months afterwards.

Of these seventy-one cases of neuralgia, (for one of the

patients had two affections of the kind,) forty were acute, and thirty-one chronic. Of the forty acute cases, thirty-four were cured, five relieved, and only one continued in the same state. Of the thirty-one chronic cases twenty-four were cured, three relieved, and four received no amendment.

Again, of the seventy-one cases of neuralgia, thirty-three had resisted the effects of divers remedies; and, of these thirty-three, twenty-five were completely cured, four were only relieved, and four more remained uninfluenced by the medicine.

Of the fifty-eight cases of neuralgia which were cured by the oil of turpentine, thirty-four were cured in less than ten days; twenty-two in less than twelve days; and three within the space of from twenty-eight to forty-five days.

Of the same fifty-eight cases which were cured, forty-eight were cases of sciatica, two of which were cured by frictions; three were cases of crural, four of brachial, and three of facial neuralgia.

Of the ten patients which were only relieved, two were affected with sciatica, and their treatment was intermitted on the second day.

Finally, of the five in which the treatment entirely failed, there were four cases of sciatica, and one of crural neuralgia. Two of the four died of disease of the hip-joint.

In twenty-one instances it is recorded that a sensation of heat was experienced along the course of the nerve, and in the affected limb; and of these, nineteen were perfectly cured; the other two, having intermitted the treatment, were only relieved.

In eighteen cases a sensation of heat was felt in the intestines, and especially in the stomach. Three were seized with vomiting, in two of whom it was occasioned by a too powerful dose of the oil, namely, two drachms.

Three suffered from diarrhoea and severe colics; and in one instance the inside of the patient's mouth was affected with vesicles.

In five cases the urine was more abundant than natural; and four were attacked with strangury. Two of these had taken too large a dose.

In ten patients there was sweating over the whole body, and in two instances it was confined to the member affected.

And, lastly, one woman, affected with neuralgia, was, as it were, intoxicated by the turpentine; and two other patients experienced the sensation of itching throughout the whole body.

DISEASES IN HINDOSTAN.

A Memoir on those Diseases which proved so fatal to our Troops during the Burman War; with a comparative Sketch of their analogous Cases in Hindostan, during a Service of some years.
By JAMES WALSH, Assistant Surgeon 89th Regiment.

(Concluded from p. 115.)

SUCH was the general character of disease prevailing nearly the whole of our force in the Pegu Delta and province of Lower Siam for the first few months, but, towards the termination of the monsoon, affairs put on an improving appearance. A more gratifying order of things now took place, a better and more varied supply of all the necessities of life began to meet the eye, and to cheer our hitherto desponding minds.

The weather, too, becoming dry, pleasant, and cool, so powerfully contributed to the improvement of our general health and feelings, as enabled the force to undergo, with little comparative illness, the incessant military operations from November 1824 to the following January, which were called for by the imposing attitude and immense force of the Burmans, then collected about Rangoon, as they flattered themselves, for our total extermination.

Those barbarian hordes being, however, broken down and dispersed, we at length (February 1825) commenced the long-projected advance towards the interior.

Our progress was necessarily slow, as the two divisions of our force, one by land, and the other in boats, had to communicate occasionally, thus giving rise to much delay. The obstacles, also, to the advance of the water column were sometimes so great and formidable as to be productive of casualties and illness to no small extent.

The illness, being the effect of the new circumstances in which the troops were placed, had a somewhat diversified appearance.

Cooped up in boats for weeks, without bedding, or adequate protection from the heavy, raw, and chilling dews of the night; exposed, on the other hand, during the day to a powerful sun, with a very insufficient awning; and, to wind up the climax of uncomfortable accommodation, they were generally so crowded that the whole space could scarcely afford more room than two and a half feet by one to each man!

Thus much for the boats more immediately military; while the subordinate staff, commissaries, and their clerks, pilot lads, or lead boys, as they are called, now command-

ing boats, or divisions of boats, might be seen in large and decked vessels, with commodious cabins, or other comfortable and ample accommodation; yet at the same time a boat could not be obtained for the sick or wounded without some difficulty and delay.

The soldiers were attended, and supplied with medicine, in the boats wherein they were originally crowded, as often as I could procure a canoe, or other means of visiting them. On one occasion, a case of cholera was reported from a distant boat; but, although every effort was made on my part, no conveyance could be obtained for hours, when it was too late; as I found the man in the last stage of collapse, and dissolution so fast approaching that he was nearly incapable of taking medicine.

Officers, also, some of whom laboured under severe and complicated disease, could not have from me that degree of attention their cases required, and which I was anxious to pay, in consequence of my not having been furnished with a boat for this indispensable purpose, notwithstanding my urgent and repeated applications to that effect. At length, when the voyage had considerably advanced, a vessel was fitted up for hospital purposes; and, although its means of accommodation were far too limited, it was still of advantage, as it was capable of receiving a few of the very worst cases, and so far of lessening the already overcrowded state of the other boats.

We were by this time drawing towards Prome, and all hearts were elated with the hope of again encountering the enemy; and, under the improved diet, and continuance of favorable weather, or N.E. monsoon, a corresponding change in the nature of morbid action began to show itself extensively, in spite of the untoward circumstances lately noticed. Disease became less frequent, and, although cholera and remittent fever would sometimes show themselves, they were in general of a less fatal description than what took place in the low country.

On the return, however, of the wet monsoon, which set in soon after the capture of Prome by our troops, in April 1825, sickness manifested itself with renewed violence and frequency, but by no means with the extensive mortality experienced in lower Pegu, although several deaths took place.

During this second rainy season the troops were very little called upon for military exertion; of course, illness and a fatal result were proportionably lessened. The country, also, about this time yielded an abundant supply

of fresh provisions, beef, poultry, and vegetables; the immediate effect of that freer intercourse with the natives, which we were at length able to establish. The general state of the force, with respect to comfort and equipment, became; therefore, so much improved that the troops looked forward with perfect confidence to the result of the expected renewal of hostilities, notwithstanding their amazing numerical inferiority to the Burmans crowding about them.

Military operations were recommenced by the European part of the force on the 1st December, 1825, and continued with triumphant success up to the 6th, when an enemy could no longer be found till our arrival at Patangow early in the following January, after a forced and harassing march of about 250 or 300 miles. In these first days of success, a great degree of exposure, hardship, and privation was necessarily undergone, and yet was not succeeded by illness in any shape, at least for some days.

It was deemed advisable not to allow the tents or baggage to accompany the force during the continuance of these operations; consequently, every one had to bivouac as well as he could, some on very high ground, surrounded by swamps, and with an unusual degree of cold at night; others on ground rather low, and as yet not perfectly dry; all exposed to nocturnal fogs, chilling, dense, and thick enough to give a thorough wetting; the thermometer at this time ranging from fifty to sixty degrees at night, to upwards of one hundred in the middle of the day. Yet all this was borne, I believe, with a general exemption from illness for the time; which must, no doubt, have been the effect of the previous excitation and triumph so generally felt.

But this state of things at length subsided: excitement, no longer kept up by the presence of the enemy, soon sank into exhaustion and debility; to which intoxication, and irregularity in the distribution of rations, must have materially contributed; thus affording an ample field for the influence of a powerful morbid agency, necessarily arising from extreme and rapid atmospheric vicissitude, combined with strong miasmal impregnation.

After our first movement in the pursuit, a halt for two or three days was necessary, to bring up our baggage and *matériel* from Prome. Ground for an encampment was therefore selected, and, with our usual infelicity, the tents were pitched in a low flat, with a surface of

slimy mud, by no means fully dried, or freed from rice straw in a state of decomposition. The powerful action of a few days' sun had formed large and numerous fissures in this ground, presenting to the medical eye so many channels for poisonous exhalation. To complete the picture, it rained so heavily for some time that the surface became soft and miry throughout, and in some places covered with water.

Here cholera of the old character again renewed its ravages, surpassing, if possible, in the fatal rapidity of its collapse, the former visitation in the Pegu Delta. Sixteen, twenty, or more, were, perhaps, sent into Prome, about twelve miles distant, in one day; as the purposed rapidity of the pursuit admitted of as little incumbrance as possible. Some died on the way; others while being put on the miserable dhoolies, or conveyances for their transport; and all, or the much greater part, I believe, sooner or later.

Another halting place was differently circumstanced, but by no means less productive of sickness, although of another kind. The tent flags, and of course the tents, were placed on the slopes of some very high rising ground, but so near their base that several were necessarily in the soft ooze formed by the surface water or springs descending from these hills to an extensive swamp, within forty or fifty yards of the camp, and exhibiting most abundantly all the materials for the extrication of a highly concentrated and virulent miasm. A different morbid action now evinced itself. Cholera had by this time nearly subsided, or had rather, perhaps, exhausted itself by the destruction of its victims, and was succeeded by remittent fever to such an extent, that upwards of 150 were to be carried in every possible way, on gun carriages, carts, boats when near the river, &c. As for dhoolies, the usual conveyance for sick on a march in India, where they are liberally furnished and equipped, at least in the Madras presidency, the number allotted on this occasion to the 89th may have been ten or twelve! and several of these were so broken down as often to give way, and tumble out the unfortunate soldier, already sufficiently suffering under complicated injury or disease. In this way, too, the soldier might be observed to sink in death, exhausted by a repetition of the tumbling, as well as by exposure to the sun, owing to the imperfect construction of machines, which in India have all the advantage and comfort of the more costly palankeen.

At length the force reached Patanagow, on the east

bank of the Irriwaddy, directly opposite to, and in a great measure commanding, the extensive fortifications of Mallown.

A treaty was entered upon immediately; and, during the time which elapsed in its discussion and expected ratification, fever manifested itself to as great an extent as before; in many cases with excessive violence, and in all with much obstinacy, as well as with great irregularity and variety; but universally of the remittent or intermittent form, evidently arising from jungle or marsh miasm. The violent remittent appeared to be the effect of jungle effluvia or impregnation; while those more immediately in the neighbourhood of the swamp or marsh would generally put on the intermittent type.

About half of the officers (seven or eight), with upwards of two hundred men, out of three hundred with whom our march was commenced, were at this time attacked with no small violence. Two of the officers soon sank, while the progress of the others towards recovery was extremely slow, and attended with much difficulty, as well as with a disposition to frequent relapse. The mortality among the men approached nearly to that which had taken place lower down; and, altogether, such was the result of illness, casualty, and death, that the battalion, when setting out for Pagham-mew, after the capture of Mallown, could only muster three or four subaltern officers, and about eighty men for duty! out of nearly one thousand who originally came over, or afterwards joined.

The treatment of these jungle fevers required very little deviation from what had hitherto been practised in the alluvial remittent of the low country; but, as the sensorial disturbance and general excitement in many cases appeared likely to lead more rapidly to disorganization, temporal arteriotomy was more frequently employed, and that even as a substitute for leeches, now no longer to be procured. It was observed to be attended with a more rapid diminution of high vascular reaction than venesection in general produced; the violence also of cephalic determination was seen to yield more satisfactorily when it could be fully and promptly performed. But, although not always procuring the wished-for extent of depletion, owing to bad lancets or other unavoidable circumstances, it always evinced effects superior to those of any other mode of topical blood-letting that could be attempted. When free depletion and purgatives had sufficiently lowered and prepared the system, mercurial action was promoted as quickly as

possible, and with the best effects. Soon after subjecting the patient to this active treatment, the febrile attack would occasionally intermit as before, or nearly subside, when the cinchona was given with success. But so great had been the consumption, and so general the demand for this remedy, that an adequate supply was not always to be obtained. In this unfortunate predicament, the exhibition of the medicine was necessarily limited, and too often the progressive convalescence, previously so promising, would be retarded, or perhaps wholly lost.

As the facilities of communication and conveyance by water had by this time much improved, and as the troops were preparing for a further (and their last) advance, the more grave and serious cases were selected and sent down to Prome; the less serious and the convalescent were brought up the river, with the portion of the force proceeding by that route. During this change of conveyance and removal from the scene of the original morbid impregnation, the conclusions previously laid down were more strongly confirmed; as the generality of the cases so forwarded soon assumed a marked change of type, with every promise of increasing amelioration; except in those who had previously laboured under great and obstinate functional derangement, or incipient disorganization of some viscus, for whom, alas! no hope could be anticipated from any possible change of scene, circumstances, or treatment.

The contest had by this time been drawing towards a close, and the progress of our little army up the country at length ceased, on the enemy having finally acceded to those propositions, into the discussion of which they had entered on two occasions before, but with much more of finesse and subterfuge than with any purpose of acquiescence, till impressively convinced of its urgent necessity by their repeated and signal defeats, and by our near approach to their capital.

Of the still more frightful mortality of Aracan, I had no direct or satisfactory conception, as my range of service in the Burman empire was confined to its provinces of Pegu, Lower Siam, and Ava. Appalling, and almost incredible as our losses and privations were in the first and latter of these countries, I have had reason to infer that they were, if possible, surpassed in that portion of our army serving in Aracan; although, at the commencement, the troops there were said to have been better supplied, and in a great measure exempt, at least for a time, from the visitation by which we were so rapidly and fatally assailed.

At Tavoy and Mergui, the principal places of Lower Siam to which my regiment was despatched for some weeks, before our first movement towards the Burman capital, we experienced an unexpected and fortunate change of circumstances, so different from what we underwent a short time previously at Rangoon, that the most beneficial consequences ensued. Disease, which had made such ravages up to this period, now began to confine itself to those chronic or relapsed cases, principally of scorbutic dysentery and intermittent fever, which had been allowed to accompany the expedition, chiefly with the hope of deriving benefit from the voyage and change of scene. This expectation was in some measure realized, as some of the hitherto hopeless cases soon began to put on an improving appearance, and a greater disposition to yield to medicine and regimen.

Tavoy, which surrendered on our approach, afforded supplies of almost every thing that could be wished for, an abundance of poultry, fish, fresh beef, and pork, with a great variety of tropical fruits and vegetables; to nearly all of which we had for months been strangers. A good understanding, too, was soon established with the natives, a mixed race of the old Siamese with their Burman conquerors, who freely gave up the produce of their farms for our subsistence, and often for an inadequate compensation. The climate, although within thirteen degrees of the equator, was found infinitely superior to that of Rangoon, Calcutta, or Madras, and might be said to resemble, or even to excel, the general temperature of the Malabar coast. Although so much more to the southward, the heat was by no means so great as in those last-mentioned places, the thermometer at this time of the year ranging gradually from seventy to eighty-six; nor could atmospheric vicissitude be observed at any time to a sudden or considerable extent. The general aspect of the country was rather wild and uncultivated, but still many places might be found beautifully romantic and diversified.

This may serve as a view of part of the interior, yet the approach to the town by water, or what is called its anchorage, (a space of about thirty miles,) was very different. The town and its neighbourhood proved delightful and healthy, but the anchorage seemed much the reverse. Surrounded by an amphitheatre of high peaked hills, terminating suddenly in abrupt or swampy valleys, all thickly covered over with wood and jungle, and having a few roads only of level or miry ground between the

river and those hills towering one behind another, yet running more or less parallel to it, the exhalations were necessarily miasmal in a high degree; and so loaded was the atmosphere with a heavy dense vapour during a great part of the morning, that it required some hours of strong sun to clear it.

As the channel did not admit the passage of the larger ships to the town, the sick were all ordered on board the transport under my charge; yet, although a delay of three weeks took place in this unpromising situation, the deaths were comparatively few, and the admissions also were, in general, of the old and often relapsing cases.

As arrangements were in train for the permanent occupation of this and other districts, the troops were deriving the fullest benefit from the ample comfort and gratifying variety of accommodation so unexpectedly found there; and, with renovated health, and high spirits, proceeded to Mergui, the next point of attack; by no means so easy or bloodless a conquest.

This town is about one degree nearer the line, and proved still superior to Tavoy, presenting as pleasing and diversified a landscape as can well be imagined. Although nearly open to the sea, it is amply protected from its violence by an archipelago of islands, extending some way along the coast, and forming capacious channels to the immediate anchorage of Mergui, situated at the mouth of the Tanasserim river. This anchorage, as well as the town, additionally protected by other islands in its close neighbourhood, furnishes a highly picturesque and romantic view, admirably fitting it for the convalescent establishment formed there soon after its capture. Its position is so elevated, and generally so well cleared, as scarcely to admit of miasmal formation; and its having yielded an abundant and permanent supply of every necessary of life, adapted it more particularly for the reception of those cases of chronic illness or casualty, which did not seem to call for being immediately invalided, but which might still require a change of scene, if only as an advantageous removal from the more immediate neighbourhood of military operation.

VAPOUR BATH.

On the Origin of the Vapour Bath. By THOMAS RIDGWAY, M.D.
Licentiate of the Royal College of Physicians, &c.

LOOKING over the whole range of medical remedies, we shall probably not find any one class of them so generally applicable and useful as bathing, or the immersion and ablution of the whole body, or of any part thereof, in a fluid medium, of a composition or temperature adapted to the particular end in view: and this, whether it be considered as a means of cleanliness, or as an adjuvant in the cure of disease.

The almost total neglect of this remedy in all its various forms in this country, has long been a subject of lamentation to those who were conscious of its value, and of the benefits which would necessarily arise from its universal adoption. As an elegant luxury, it is still known only to the few; as a means of cleanliness, it is almost totally neglected; and the medical practitioner but rarely avails himself of its powerful influence and assistance.

Although the simple immersion and ablution of the body in water is attended with great advantages, in preserving cleanliness, promoting health, and removing disease, there can be no doubt that, as a remedy, it may be rendered much more powerful, and, therefore, in many instances more efficient, by elevating the temperature of the fluid so as to raise it into vapour, involving the whole body in a warm exhalation, mollifying, and disposing the adherent recrementitious matters to be thrown off; while, by the increased heat, the fluids of the body are invited from the centre of the system towards its circumference, and permitted to pour themselves forth in profusion over its infinitely porous and permeable surface.

The physicians of Paris have, of late years, most meritoriously turned their attention to the perfection of this form of immersion, termed the vapour bath, which, both in its simple and its medicated shape, has been productive of incalculable advantage. Mr. Green, an intelligent surgeon, formerly of the royal navy, has, with much pains and assiduity, introduced these baths into England, and established them upon an extensive and admirable plan in a central situation in London, so that medical practitioners have the advantage of directing them in any mode they may think proper, under a superintendence with which they cannot but feel satisfied.

It is, however, curious to know that, notwithstanding we

seem now to have derived this method of bathing from France, it was originally invented in this country. There has lately fallen into my hands a book, wherein both the general vapour bath, as well as that called by the French *douche*, or stream bath, are both of them accurately described; and that even under, at least an attempt towards, a medicated form. The book is entitled "A Physico-Medical Essay concerning Alkali and Acid, so far as they have relation to the Cause or Cure of Distempers, &c. By JOHN COLBATCH, Physician. London: printed for Dan. Browne, at the Black Swan, without Temple Bar. MDCXCVI." That is, about 130 years ago; and the passage which alludes to our present subject is as follows:

"Besides the service done to mankind by drinking of mineral waters, what advantage does accrue to many people labouring under some sort of nervous distempers, &c. by merely bathing themselves in the nitro-sulphureous hot baths.

"There is also a new way of sweating, by the means of the volatile-acid steams arising from the evaporating brine, in the making of salt at our English salt-pits, lately invented by Mr. Henry Hodges, of Droyt-Wych in Worcestershire; by the means of which several very great things have been done, even in cases where the Bath, common hummums, and bagnios, have proved altogether ineffectual. I am sorry that I am at a place where I cannot procure a number of experiments to insert in this place, which might be of service to mankind; but, to supply the place of them, I shall add something done in a little bathing-house I erected of my own, wherein I imitated, if not outdid, the way of sweating at Droyt-Wych; but my many avocations hindered me from the prosecuting of it.

"I procured a quantity of the virgin salt from the salt rock in Cheshire, and, as I had occasion, I dissolved a convenient quantity of it in spring water, making a brine as strong as that obtainable from the brine-pits. With this brine I filled a large iron pot, which had pipes of wood went from it to a little room overhead, made convenient for people to sweat in. Under my pot I made a fire, which both warmed the room and made the brine to boyl, and from the boyling brine arose such quantities of steams as filled my room, which, when it was warmed and full of steams, was fit for use. I had, besides the large pipes which supplied the whole room, several others of different lengths, by the means of which I more forcibly conveyed the steams to any particular part. By this way of sweating, I have known a gentlewoman cured, as was also one at Droyt-Wych, of an inveterate leprosy, which had eluded the efficacy of all other medicines and baths. It rarely failed taking off the most violent old aches and pains. In all relaxations of the nerves and tendons, I have never met with any thing comparable to it. To be short, I found it as good as the Bath in

Mr. Leonard's Case of Perforation of the Stomach. 217

most things, and in many out-did it; and I believe Mr. Hodges, computing the time he has used the way of sweating at his brine-pits, and the number of people he has had, can produce a greater catalogue, and more considerable cures wrought, than hath been at the Bath."

To those who have had the good fortune to visit the Hospital of St. Louis at Paris, the above description cannot fail to bring forcibly to remembrance the internal arrangements of that fine institution; the sudatory, with its numerous orifices pouring forth vapour on the persons of those arranged within it, and the streams and jets directed to any particular part.

To the French physicians belongs, in all probability, the merit of reviving the use of the vapour bath; certainly of bringing it, together with a knowledge of the diseases of the skin, to a degree of perfection which, without their efforts, would scarcely have been attained. With us it remains to reflect that a knowledge of this admirable remedy was first elicited among ourselves; to be sensible how long and injuriously we have neglected it; and to make now the atonement which is alone in our power, of urging ourselves and others to its more frequent adoption, and of bestowing that attention on its properties, whereby we may make it to approach nearer to perfection, and become more extensively beneficial.

London; January 22d, 1829.

PERFORATION OF THE STOMACH:

Case of Perforation of the Stomach. By JAMES LEONARD, Esq.
Member of the Royal College of Surgeons, London.

WM. SHEPHERD, aged twenty-six, by trade a stonemason, was leaving the quarry at six P.M. when he suddenly laid his hand upon his left side, uttered a groan, and fell. I found him with a face indicating extreme anxiety, livid lips, his knees drawn up towards his belly, which, owing to the contraction of the muscles, was as hard as a board; his breathing short; his nostrils dilated; his pulse 130, small and thready; urgent thirst; cold extremities, and violent pain diffused over the whole abdomen, but most acute in the left hypochondrium.

On examination, I found no hernia, but was informed that his bowels were constipated, the last alvine evacuation having taken place three days before.

Being of opinion that it was a case of peritonitis, I opened a vein on the spot, but got only twelve ounces of blood.

Upon his removal to his house, however, I took thirty ounces more, and his pulse became fuller. A warm bath was prepared, and after he had been in it ten minutes the pain abated. As soon as he was taken out of the bath, a large vesicator was applied to the abdomen, and an ounce of Oleum Ricini was given to him, which he had scarcely swallowed when he retched violently, but rejected nothing. The pain in the abdomen rapidly increased, with excessive thirst, and dreadful restlessness. About midnight I took twenty ounces more of blood. Enemata of various composition, chiefly emollient, were administered during the night, without effect. His belly was excessively tense, and he had drunk much, but vomited nothing, although the retching was severe.

At four A.M. his pulse began to intermit, and at six was imperceptible; and, while grasping the vessel to take another draught, he fell back and expired.

Twenty-four hours after death the body was inspected, and exhibited the following appearances. On opening the cavity of the peritoneum, the first thing that presented itself was the Oleum Ricini, floating on the surface of a large quantity of turbid fluid, amounting to not less than three or four quarts. The peritoneum was highly vascular, and large patches of a gangrenous appearance were visible on several parts of it. From the intestinal portion of that membrane much coagulable lymph had been thrown out, so as to fill up the spaces between the convolutions, and produce the appearance of a continuous surface, which was easily broken down. The omentum was equally vascular. On raising the left lobe of the liver, a small orifice was visible in the anterior surface of the stomach, about two inches from the pylorus. At the point of perforation the stomach was an inch thick. The diameter of the tumor was about an inch and a quarter. The external orifice was perfectly round and well defined, as if stamped out, and would have admitted a pea. The internal opening was ragged, and surrounded with a yellowish pus. The stomach was quite empty, and had no adhesion to the liver at the place of perforation. With the exception of great vascularity, produced by the irritating substances admitted into the cavity of the peritoneum, the other viscera were healthy.

The deceased had, from the age of sixteen to that of twenty-two, been much addicted to the use of undiluted ardent spirits; but, for four years previous to his death, having been troubled with symptoms of dyspepsia, he had been advised to live more temperately. With this advice he had complied

and was much better; but occasionally there was a return of the acute pain under the ensiform cartilage, accompanied with vomiting, which seldom lasted above four or five hours, and always yielded to an anodyne draught, followed up by some mild laxative medicine.

Having read Dr. EBERMAYER's cases, recorded in Rust's Magazine,* I find that this case coincides, in most of its features, with his: viz. that it was of a chronic nature; that there were scarcely any previous symptoms indicating extreme danger; that the powers of digestion were but very slightly affected by the disease; that there was no emaciation, although his countenance had not the ruddy appearance of health which would have been expected from the muscularity of his body.

In this case, however, the remote cause would appear to have been *long-continued irritation* from the stimulus of ardent spirits. Perhaps the stomach, having been so long accustomed to the stimulus, might have suffered a diminution in the secretion of gastric fluid when it was left off; but the disease existed before that. And his opinion that in no case had any traces of inflammation or ulceration been observed, is not in accordance with what this case demonstrates; for it was evidently the result of a long-continued process of chronic inflammatory action and ulceration, yellow pus being found in the wound. In other respects the cases are similar. Wherever the disease occurs, it must prove fatal, and no peculiar symptoms mark the case till too late for human aid to be of any avail.

6, St. Martin's street; Feb. 7th, 1829.

ANIMAL MAGNETISM.

On Mesmerism, improperly denominated Animal Magnetism. By RICHARD CHENEVIX, Esq. F.R. and E.S. M.R.I.A. &c.†

ANIMAL magnetism is true. In the whole domain of human acquirements, no art or science rests upon experiments more numerous, more positive, or more easily ascertained. As this assertion is in direct contradiction to the

* We gave a translation of these cases in our Number for October, 1828.—EDITORS.

† We are informed that Mr. CHENEVIX intends paying us a visit in London and that he is prepared to convince the most sceptical that "mesmerism" is not the system of juggling imposition which by many it has been believed to be. For our own parts, we candidly confess we are yet to be converted. Our opinions upon this subject are fully stated in the November Number of 1826. We hope Mr. C. will give us an opportunity of witnessing the effects, of animal magnetism.—EDITORS.

vast majority of current prejudices, it is just to state the grounds upon which it is made.

In former times, whenever animal magnetism was mentioned, I joined the general tribe of scoffers; and so much was I convinced of its absurdity, that, being at Rotterdam in 1797, I laughed to scorn a proposal made to me by an English resident there, to witness some experiments in which he was then engaged. His assertion was, that a somnambulist of his should, in her sleep, without any signal from him, leave her chair, and seat herself on any other chair which he should mentally designate. The respectability and general understanding of this person left no mode of accounting for so extraordinary an illusion, but to suppose him labouring under monomania.

In 1803 and 1804, while travelling in Germany, I heard many very enlightened men of the universities talk of animal magnetism, nearly with the same certainty as of mineral magnetism; but their credulity I set down to the account of German mysticity, and thought it not incongruous that the nation which took its philosophy from Kant, and Tiehte, and Schelling, should believe that certain motions of the hands could, by the will of the mover, transmit an influence to the person acted upon, which should produce the wonders related of animal magnetism. I remained an unbeliever.

In 1816, some persons of my acquaintance proposed to take me to the house of a lady in Paris, whose daughter was an artificial somnambulist, and, in the terms of the art, lucid. I went to laugh: I came away convinced.

To suspect any thing like a trick in the parties concerned was impossible. They were of the highest respectability and distinction, and some of them I had known for many years. The magnetiser was, indeed, in the frivolous French metropolis, called a charlatan, which made me suppose that he was not so; and the event proved that I was right. He was, indeed, poor; he exercised his art for money; he gave public lectures at three francs a ticket. Many young physicians have as fair a claim to the title as he had. But, from the hour above alluded to till the period of his death, I remained acquainted with the Abbé Faria, and never knew a man to whom the epithet impostor was less applicable.

No sooner had the Abbé Faria begun to operate than the countenance of the young lady changed, and in two seconds she was fast asleep, having manifested symptoms which could not be counterfeited. The sitting lasted about two

hours, and produced results which, though I still remained a sceptic upon some of the most wonderful phenomena, entirely convinced me of the existence of a mesmeric influence, and of an extraordinary agency which one person can, by his will, exercise upon another. The Abbé Faria offered every means to dispel my remaining doubts, and gave me all necessary instructions to obtain total conviction from experiments of my own. I most zealously attended his labours, public and private, and derived complete satisfaction upon every point relating to mesmerism; even upon those which appear supernatural. Many of the experiments I repeated, not only upon persons whom I met at his house, but upon others totally unacquainted with him or with his studies, and was ultimately compelled to adopt the absolute and unqualified conclusion announced above: "Mesmerism is true." Other occupations, however, prevented me from continuing the subject, and I had only casual opportunities for exercising the art, until accident called back my whole attention to its truth and importance.

Witness of some of the wonders which have lately been the subject of discussion in the French Academy of Medicine,* and surprised at the pusillanimity of that body, which cannot deny, yet has not manliness enough to avow, the facts which one half of its members declare they have witnessed, I resolved, with all due humility, yet not shrinking from the task, to devote some time to the collection of facts, and to offer the results to a much more enlightened public than that to which the art is compelled to appeal in France.

My first opportunity for renewing my practice was in May 1828, when, happening to be on a visit to Ireland, I inquired for some patient among the peasantry, no matter what the disorder.

Jane Hurly, an epileptic woman, aged thirty-four, was produced; and as, but a short time before, she had been seen in a fit by a person of the family at whose house I was residing, there could be no doubt of the reality of the distemper. Besides, she had lately fallen into the fire in a paroxysm, and most dreadfully burnt her leg. She had been six years epileptic; had a strong tendency to paralysis of the left leg and thigh; was subject, almost daily, to spasmodic contractions in her hands and feet, accompanied by racking pain, and which sometimes lasted twelve hours

* *Expériences publiques sur le Magnetisme Animal faites à l'Hôtel-Dieu de Paris*, par J. DUPOTEL. Also the case of Paul, in the *Hermes*; by Dr. FOISSAC.

Délibérations de l'Académie de Médecine sur le Magnetisme Animal. Rapport fait par M. HUSSON.

or more; had occasional absences of mind and loss of memory; never slept more than a couple of hours at once, and that but rarely; was constantly thirsty; her appetite was bad. She was eight months advanced in her sixth pregnancy, and it was after her first confinement that she had her first attack.

Tuesday, May 23d.—Mesmerised her for forty-five minutes; no sleep, but a little drowsiness.

24th.—Night better than usual; no spasms in hands or feet. Mesmerised her again forty-five minutes: no sleep. Gave her mesmerised water to drink.

25th.—Felt heavy and drowsy ever since yesterday. Mesmerised her again forty-five minutes: no sleep.

On the 26th, I did not mesmerise her.

27th.—The day before yesterday, she had a return of the spasmodic contractions of the hands and feet, but they lasted only two hours. This day, after mesmerising her for nine minutes, she fell into mesmeric sleep. She feels herself stronger and better than when the treatment was begun.

On the 28th, I did not see her.

29th.—She fell asleep in three minutes, but awoke as soon as spoken to. Yesterday she had a second return of the spasms, but only in one foot, and for a few minutes. The use of mesmerised water, begun on the 24th, had entirely assuaged the thirst, which used to be habitual and intense. Dr. M'Kay, whom I shall presently mention, was present at this sitting.

30th May, 1st and 3d of June.—Fell into complete mesmeric sleep after two minutes' mesmerising. Her health is improving rapidly.

5th June.—The person at whose house I was visiting being desirous of seeing some effects of mesmerism, I put the patient to sleep in his presence in six minutes, by my will alone, and without any visible manifestation of it.

7th.—In the presence of the same person, I mesmerised the patient through the door, and at the distance of fifteen feet; she not knowing that I was acting upon her, but supposing that I was absent; and in fourteen minutes she was in complete mesmeric sleep.

10th.—Being absent, I did not see this woman for two days. In the interval she had a severe spasm in her left leg and thigh for six hours, followed by cold and numbness in those limbs. This day I put her to sleep in half a minute, and mesmerised the part affected. In forty minutes I wakened her: the pain was gone, and the limbs had recovered their natural strength and heat. This was the last return of these symptoms. By this time she had completely recovered her sleep, not only at night, but was frequently obliged to lie down in the day, after quitting me. She now slept ten or twelve hours in the twenty-four, and one day sixteen hours. She continued rapidly to improve in health, and her appearance was so much changed that her neighbours, who

knew nothing of the treatment, were struck at the alteration. The operations were continued until June 20th, when her pregnancy made her unable to come out; and on June 28th she was delivered.

July 6th.—I went to her house, and found her up and well, with the exception of rheumatic pains in her left shoulder, for which I mesmerised her. She soon felt them descending to her elbow, and thence to her wrist, and in less than ten minutes was perfectly relieved.

17th.—She came to thank me for her entire recovery; and, to prove it to myself, I mesmerised her during thirty minutes, with the strongest will to put her to sleep; but, though formerly she fell into mesmeric sleep in half a minute, I could not now produce the slightest effect upon her.

I repeated the same experiment the next day, but with no effect. I did not then see her until September 17th, when I again attempted, but in vain, to produce mesmeric sleep.

It would be childish to attribute the cure of this woman to her pregnancy or her confinement. From the very first day she was mesmerised, the symptoms were alleviated, and decreased regularly as the treatment advanced. In less than a week, thirst, insomnia, shiverings, and pains, to which she had been subject for six years, ceased; the paralytic tendency diminished; and the spasmodic contractions were entirely removed after the twelfth day of mesmerising. Before her confinement, her health was completely restored, and she has not had a return of epilepsy for nine months, though the attacks were formerly very frequent. If this case does not offer a fair affiliation of cause and effect, there is no truth in deducing the cure of ague from the administration of bark.

Although none of the extraordinary phenomena of lucidity occurred; although this patient awoke the instant she was spoken to; her cure is interesting, as being completed so rapidly. Twenty-one sittings sufficed; and after them, and the cessation of all former symptoms, I could not produce any sensible effect upon her. Even at the period when she used to be most affected, the touch of my finger, so slight as to be almost imperceptible to myself, roused her from her state of mesmerism, and with a sensation which she described as like the prick of a pin. I have known some educated persons, who experienced a similar sensation, compare it to an electric spark.

Epilepsy is one of the diseases where the medical art is the most in default. It is also one where mesmerism effects the slowest cure. I have known a case in which this powerful agent was employed daily, for an hour each time,

during seventeen months, and in which, though the symptoms had begun to yield almost at the first sitting, the cure was not complete before that period. Its frequency among the lower classes is extreme; for in six months I saw thirty-seven cases, thirteen of which I treated myself, by no other means than mesmerism. In three of these cases I was completely successful; in eight more I procured immense relief; two only were failures. Four of the eight are still under treatment by me, and the remaining four are treated by a relation of each respective patient.

Judith Doonah, a laundress, was afflicted with violent pains in her head, which returned periodically every sixth day, and the precise nature of which was not entirely ascertained by physicians. In the opinion of some they were rheumatic; according to others, they partook of the nature of *tic douloureux*. They came at the end of a bad ophthalmia, and continued long after that disease had subsided. The right temple, cheek, eye, and shoulder, were the parts particularly affected.

June 23d.—I mesmerised her for the first time, and during a paroxysm. In a very few minutes she found relief. I repeated the operation thirteen times, but, being occupied with other patients, I could not sufficiently attend to her. I gave her, however, mesmerised water to bathe the part affected, and a piece of mesmerised glass to wear upon the temple. From June 29 till July 20, she had no return of the pains, but on the latter day she had a slight attack. Shortly after this I left the country where she was, and did not see her for two months. The pains had returned, though not quite so frequently. As I had not time to mesmerise her constantly, I recommenced the mesmerised water and glass; and in six weeks she was completely cured, without the use of any other remedy.

Between May 23d, 1828, and January 20th, 1829, I tried the effects of mesmerism upon 164 persons, of whom 98 manifested undeniable effects; some in one minute, some not till the operation had been repeated several times. There was hardly an instance where disease existed, that relief was not procured; and many of the patients offered phenomena as extraordinary as any recounted in Germany or France. The space allotted to this communication does not allow a minute relation of them, and I must confine myself to turning the public mind to this most wonderful agent, which, like all that is new, has been assailed by ignorance, by prejudice, and by ridicule, yet which is as true as gravitation or affinity. While prosecuting these experiments, I had the good fortune to meet with many benevolent and zealous persons, not of the faculty, who have made trial of the art with entire success, having hardly ever failed to procure

relief for their fellow-creatures, at the same time that they produced phenomena which highly surprised and gratified them. I can at this moment count at least fifty persons who have become converts and practitioners in consequence of what they had heard or seen, directly or indirectly, by my means; and who have assuaged the pains, if not cured the diseases, of some hundreds of suffering individuals, without the aid of medicine. To this list must be added three enlightened practitioners, Drs. M'Kay, Cotter, and Peacock, all of them physicians to public establishments in the neighbourhood of the place where the experiments were made. The former kindly lent his assistance upon all occasions, to determine the nature of the disease, the progress of the cure, &c. and witnessed many wonderful phenomena, of which he is ready to testify the truth to all who may require it. The protracted scepticism of the second led to the following trial:

On Thursday, October 2d, I requested Dr. Cotter to be present at some mesmeric experiments. He saw two epileptic patients put to sleep in about half a minute each. One of them, while under the mesmeric influence, had a slight fit, which, by increasing the action, I arrested instantaneously. The other he saw me strike motionless, by my will alone, as she walked across the room, and set at liberty in an instant by the same agency. To these facts he, as well as two other gentlemen present, could not refuse their assent; but still a suspicion of connivance and trick might lurk in his mind. I requested him to bring me any five patients of his own, whom he was sure I never could have known or heard of, and to hang his conviction upon this test, that I would, in half an hour, produce effects upon one of these five, which should convince him of the existence of the mesmeric influence.

On Saturday, October 4th, he came with a female patient, whom he had been treating for dyspepsia, costiveness, and headach, during four years. Her usual aperient dose was thirty grains of jalap with ten of calomel. I never saw her till that day, and only in the presence of Dr. Cotter. She had no idea of what was to be done to her, and was at the moment suffering with severe headach. In three minutes' mesmerising she said her headach was better; in five minutes she said it was quite well. In eight minutes she was in one of the soundest mesmeric sleeps I have witnessed, and continued so for thirty-five minutes, when I awoke her.

While she was asleep, Dr. Cotter said to me, *in Latin*, that her bowels were at that moment particularly bound.

I directed my attention to procuring an evacuation, passing my hands before the abdomen, without, however, touching it, or approaching nearer to it than three or four inches. In less than an hour after she had left the house, she had three evacuations, and for some days her head was considerably relieved. This patient lived at too great a distance for us to continue the treatment; but the following note from Dr. Cotter, relating to another patient, was this moment brought to me:

"Within this week I have witnessed the effects of mesmerism in the case of Miss P., aged fourteen. She had long been subject to an irregular pain in the left side, over the kidney, accompanied, in its attacks, with a sinking, as described to me, or a tendency to faint. Having long tried medicine without any permanent good, I was desirous to leave off a habit so injurious to a growing subject. I had recourse to mesmerism, without describing to her what I was going to try. Four minutes produced a complete state of somnolency. I have performed it upon this subject but three times, and she has had no return whatever of the pain in her side; neither has there been occasion to exhibit aperients, for which, previously, there was a continual necessity."

That any person, whether a believer or not, can produce mesmeric phenomena, may be learned from the following fact: A lady of a very robust frame, and a very energetic will, had heard and read much upon mesmerism, but was not convinced. Three patients, whom I had never seen before, were waiting for me. I proposed that she should try whichever of them she pleased. The most unhealthy female was selected. In two minutes the patient's head dropped, but she started up immediately; in less than four minutes, however, she was fast asleep. Here neither the mesmeriser nor the mesmerisee had the slightest conviction upon the subject, yet the experiment succeeded as completely as with the most habituated professor.

Neither previous knowledge nor education is necessary for the development of this precious faculty, in those who heartily wish to exercise it.

December 2d, 1828, Catherine Nicolson, a woman of the very lowest class of Irish peasantry, brought me, on her back, her daughter, aged nine, dreadfully afflicted with scrofula. She had seven sores near her knee. I instructed this woman how to mesmerise her child.

12th.—She came to tell me that some of the ulcers were disposed to heal, and that a splinter of bone had come out of one of them.

January 2d, 1829.—The girl can stand alone, and walk with a crutch. Two more splinters of bone have come away, and the

ulcer which voided them is very much inflamed; the others being better.

19th.—Three more splinters of bone have come away, one of them three fourths of an inch long, and as thick as a crow's quill.

Another girl, Bridget Hedouin, is nearly cured of epilepsy, by her father, an ignorant peasant, whom I taught to mesmerise her; the attacks being reduced to one fourth in frequency, duration, and intensity, since December 3d, 1828, when the treatment was commenced.

Both the above treatments are now in progress.

I have at this moment eleven cases of different diseases, in which a friend or relation is the operator, and nine of which are proceeding with the most extraordinary success.

I could here enumerate near two hundred examples, but I am fully aware that, in the present condition of the science, these things must be seen to be credited. I shall not, then, attempt to argue or convince my readers, but to implore them to try the experiment themselves. Every one can mesmerise, though not all with equal effect, and practice increases the power: but it is not every one who is susceptible of a sensible influence from this agency; and somnambulism is generally estimated not to occur more frequently than in one case out of five, and not one in twenty-five patients becomes lucid.

I was myself an unbeliever until I was undeceived by my own experiments: but, had I sooner taken this plain and rational road to knowledge, instead of thinking all men mad who trusted to their eyes that told them truths, which to me seemed more marvellous than all the other wonders of creation, I should, many years since, have possessed the conviction which I now enjoy, and not bewail that, in 1797, my presumptuous ignorance had shut in my own face the door of a science more directly interesting to man than all that chemistry and astronomy can teach. Nine tenths who may read will laugh at this, as I did at my friend at Rotterdam. Let them do so; but, while they laugh, let them learn, and not, thirty years afterwards, have to lament that so short a remnant of life is left to them to enjoy this new and most valuable secret of nature.

In Germany this science has long been practised; and in Berlin an hospital was established in 1815, in which no medicine but mesmerism, and the prescriptions of lucid somnambulists, was used. Hüfeland, once a scoffer, but converted; Hüfeland, in himself a host, was at the head of this hospital, and fifteen volumes of mesmeric cases have

been published. Even in Holland, last year, I found the truth of mesmerism hardly doubted; and I met with some patients at Aix-la-Chapelle who had reaped benefit from it. In France it has been believed, and reviled, and believed again, and has followed all the vicissitudes of fashion. In England it has never risen above the level of quacks, and there that level is low indeed. Its fate in these countries was exactly analogous to the characters of the respective nations. The Germans were attracted towards it by their love of mysticity, and hailed it on account of its marvellousness. This once, however, the spirit which has so often been prejudicial to the German mind, has led to truth, while other nations turned aside from the path of knowledge. In France, where words and jargon are more valuable than facts, it has been treated as a matter of opinion, not of experiment. Though all the phenomena have been produced over and over again, yet, as these phenomena are not phrases, the Academy of Medicine thinks it can argue down somnambulism, and talk lucidity out of existence. The repugnance of English minds to the supernatural in science has prevented them even from bestowing a thought upon the subject; but let a few authentic results be known, and, in this seat of powerful understanding, it will make more rapid strides in one year, and without the assistance of governments or academies, than it has done since 1784, when aided by mysticism or garrulity. Nothing can be more fair and candid than the language spoken by the partizans of mesmerism in all countries. Instead of calling themselves gifted beings in whose hands alone the power resides, they say to unbelievers, "Come, and see," and then "Go, and try."

Natural somnambulism has in all ages been so often seen, and so well authenticated, that to deny it would be absurd. Now what is artificial somnambulism, and what lucidity, but the same state as the former, produced and regulated by certain principles which all men can command. Wonderful, indeed, it may appear; but what makes any thing wonderful to us, if not our ignorance. Since the world began, men have been wondering at every thing, till habit tamed their minds upon it. In my remembrance, they have wondered at hydrogen and oxygen; at a dead frog jumping between two slips of metal; at gas-lights, and steam-boats; and now they wonder at all who wonder at those familiar themes. They would pity the wretch who would not instantly believe that a stone falls, and a balloon rises, by the

same impulse; or that the taste which his tongue perceives when placed between a piece of silver and a piece of zinc, has the same origin as the thunder which strikes his soul with awe. Every thing in creation is wonderful, or nothing is so, but the last known truth always appears the most miraculous to unreflecting minds.

Much is to be apprehended from enthusiasm in this subject. Mesmerism is beneficial in all diseases, but it does not cure all cases of all diseases. It acts with equal success upon epilepsy, fever, rheumatism, diseased liver, diseased lungs, gout, scrofula, &c. Where bark would kill, where bark would cure, this agent may be alike applied. It is the mightiest of therapeutic aids, but it is not omnipotent. It is the most beneficent, too; but, in the hands of persons disposed to make a bad use of the ascendancy which it sometimes gives over the patient's mind, it might become the most dangerous. Let honest men, then, get possession of it, that they may be able to cope with knaves.

Neither is it pathologically or physiologically that this agent must principally be considered. Its psychological importance is far above the part which it can play in the art of healing. When a human being can, by the operation of another human being, see without his eyes, taste without his tongue, hear without his ears, and obtain complete insight into things of which, in his waking state, he had no knowledge, the condition of his mind in that moment is worth investigating. Yet these things are true: they are familiar to mesmerisers, and I myself have witnessed them full twenty times. They are not, however, every-day occurrences; and the novice practitioner must not be disheartened if he does not meet with them immediately: he must be content to produce, by his first efforts, some of the simplest phenomena. Let him persevere, and he will see the wonders which other mesmerisers have seen, and add new knowledge to our present stores.

However wonderful mesmerism may appear, one thing relating to it is still more wonderful, viz. that its truth has even been questioned; since it is in the power of every one, without previous knowledge, study, or acquirements, to obtain conviction at least in a week, perhaps in a few seconds. The truth which Pythagoras told of the earth's motion, reviled in its day, was reproduced by Copernicus two thousand years afterwards, and was again reviled; but this truth required all the mind of a Newton for its demonstration. Mesmerism, which the simplest motion of the hands, directed by the will, can prove, perhaps, instantane-

ously, has been discredited ever since Mesmer first revived it; and, before his time, was often believed, and as often forgotten. To me (and before many years the opinion must be universal,) the most extraordinary event in the whole history of the human science, is that mesmerism ever could be doubted.

HOSPITAL REPORTS,

(Principally condensed from various Periodical Publications.)

FRACTURES OF THE VERTEBRÆ.

Fracture of the Bodies of the Seventh and Eighth Dorsal Vertebrae.
(ST. BARTHOLOMEW'S HOSPITAL.)

WILLIAM FRUG, æt. thirty-seven, a labouring man, was admitted on the morning of the 6th January, under the care of Mr. LAWRENCE, having fallen from the top of a house upon his back, a height of about fifty feet. As he lay upon the bed, the lower extremities had very much the appearance of having been fractured, particularly the femur of the right side, but, when examined, they were found to be quite sound. The power of motion and sensation were completely gone, so much so that he was unconscious of a considerable-sized wound upon the great toe. This loss of sensation extended all over the front of the abdomen and around the loins, as high up as the scrobiculus cordis. There was, however, perfect sensation above this part. Passing the hand up the spinous processes of the vertebræ of the loins and back did not produce any sensation or pain, until it arrived opposite to about the seventh or eighth dorsal vertebræ, where there was felt a slight depression, and a considerable degree of pain was occasioned by making the slightest pressure. The pulse was slow and labouring; the respiration not much disturbed.

7th.—No return of sensation; much pain about the part of the back that is injured; has also a distressing sensation in the abdomen, above the navel. The belly here is distended, and forms a complete contrast with the lower part of the abdomen, which is flat and senseless. Much pain in the bowels. No evacuation. Urine passed insensibly. Pulse rather quick. No appetite.—Ordered house medicine every three hours.

In the evening, there was more pain about the bowels. There had been no evacuation, and the skin was rather hot.—Ordered an enema.

8th.—The bowels have been freely opened. There is still much pain above the navel, and the abdomen is generally tense, owing to the distended state of the bladder, which had not relieved itself. By pressing the hand upon the distended viscus, no urine

could be forced through the passage; so that a catheter was introduced, and about three pints of offensive high-coloured urine drawn off, which afforded some relief. Pulse slow. The stools pass involuntarily.

10th.—Little alteration, except that he complains of pain in the throat and chest.

12th.—The pain in the throat has disappeared, but it is severe in the chest. Countenance anxious; has had no sleep; stools continue to pass involuntarily. The urine is drawn off twice a day.

13th.—Pain in the chest increased. Pulse ninety, and full.—V.S. ad 3vij.

15th.—The urine may now be pressed out of the bladder by placing the hand over the lower part of the abdomen, so that the catheter is dispensed with. Pulse slow; much thirst.

From this time the only variations in his symptoms were those of his pulse becoming quicker, and his breathing more difficult. He died on the morning of the 19th, having survived the accident twelve days.

On examining the body six hours after death, the spine was found to have a lateral curvature, which did not seem to have been caused by the injury. Upon cutting the muscles on each side of the dorsal vertebrae, much blood was seen to be extravasated in the cellular tissue around them, particularly in the neighbourhood of the seventh and eighth, the spinous processes of which were quite moveable before the saw was applied. There seemed to be so much mischief done that it was not easy to discover what was the exact injury, but the oblique processes of the eighth vertebrae seemed to be driven upwards, over part of the body of the one above. The theca about this part was of a dark red appearance, and seemed to be pressed upon by the posterior part of the body of the vertebrae, so as to cause a sharp edge to be formed. There was much blood effused beneath the arachnoid, and that portion of the cord which was opposed to the sharp edge of the vertebrae was pressed upon and softened, so as to bear no resemblance to the cord above this part; cutting into it showed several bloody points dispersed over it. Removing the cord showed the fracture to extend across the bodies of the seventh and eighth dorsal vertebrae. In the chest there was found nearly a pint of blood, chiefly in the cavity of the right pleura. There were several large spots of extravasated blood in the cellular tissue surrounding the pericardium. The lungs were filled with blood, and the bronchi had a dark red appearance upon their mucous surface.

In the abdomen there was a considerable quantity of blood effused under the peritoneum, between the bowels, and in the course of the mesentery. Blood also in great quantities between the muscles about the pelvis, but more particularly upon the right side. The hip-joint of the right side seemed to move with some freedom, unlike the opposite limb, and, when the muscles were

cut through, there was a great deal of extravasated blood around the joint; the muscles that immediately surrounded it were much torn, as was also the capsule of the joint and the ligamentum teres. There was a fracture of the external rim of the acetabulum, and the head of the bone was a little displaced.

Fracture of the Fourth Cervical Vertebra.
(ST. THOMAS'S HOSPITAL.)

THOMAS NUNNEY, a porter, aged twenty-four, was admitted into Luke's Ward, at five P.M. Jan. 21st, 1829, under Mr. TYRRELL.

About half an hour previously, he had been carrying a weight of $1\frac{1}{2}$ cwt., when his foot slipping, he fell, and he believes that the load fell upon him. He was insensible for a short time, and when consciousness returned he found himself utterly incapable of using his hands or arms. When brought in, he was in a state of great depression. The pulse was below forty, and feeble; the surface was pale and cold; the breathing not affected.

When he had been placed in bed, a more careful examination was made. There was a complete loss of sensation of every part of the surface below an imaginary line drawn round the body, opposite to the sternal extremity of the fourth rib. It is not meant that feeling ceased here suddenly; for an inch or two below this point it gradually became less and less distinct, until quite extinguished.

There was very considerable loss of feeling in the arms. The numbness was greatest in the hands, less in the forearms, and still less in the shoulders. When handled at all roughly about the shoulders, he complained of a pricking sensation.

There was also an extensive deprivation of the power of motion. This was completely lost in all the voluntary muscles situated below the part already mentioned as that at which feeling ceased, viz. the fourth rib. Some ability to move the arms still remained, but it was restricted to slowly rotating the humerus to the extent of two or three inches.

Priapism, in an excessive degree, took place shortly after the injury.

The intellect did not appear entirely to have escaped injury. There was evidently slowness of comprehension, and hesitation in forming the proper answer. He also spoke very inarticulately; but it was difficult to determine how much of this effect might be attributed to the accident, as his friends said that he always stammered; and, from cold, his teeth chattered in a very remarkable degree. Although he complained much of cold, the surface was not below the natural standard of temperature. It was thought that he still retained the feeling of heat and cold in the parts dead to every other sensation; but of this there was some doubt, and unfortunately it was not put to the test of experiment.

A very careful examination of the spine was made by Mr.

GREEN, in the absence of Mr. Tyrrell. No fracture of any vertebrae could be felt, but there was tenderness over the fourth, fifth, and sixth cervical, and the patient complained of pain there when his head was moved. Mr. Green recommended that, in the event of complete reaction taking place, he should be bled to such an extent as the pulse might warrant.

Nine P.M.—Some reaction; pulse fifty-five, and stronger, but still weak; complains much of cold; some tympanitic swelling of the abdomen; no desire to evacuate the bladder or rectum. The urine was drawn off.

22d, ten A.M.—Pulse fifty, very feeble. More difficulty in speaking, and greater slowness of comprehension. Decidedly more feeling in the arms and more power of motion, as he can, with an effort, raise them from the bed, but they immediately fall again. No stool.—Enema commune.

23d, ten A.M.—Pulse thirty-five, feeble; pupils contracted, but not equally, one more so than the other. Increased hesitation in speaking, and a tendency to delirium. The amendment which had taken place with regard to the arms has disappeared; and the priapism, incapability of emptying the bladder, obstinate constipation, and paralysis of the lower half of the body, continue unchanged. He complains of feeling very drowsy, but cannot sleep.

Ten P.M.—Pulse twenty; surface of the abdomen and thorax very cold, extremities less so. Intellect quite disordered, as, when asked a question, he begins to talk on a totally different subject; has been rambling all the evening. No stool.—Two enemata this day.

24th.—Has continued in the same state, talking almost continually, until four this morning, when he died, without having been insensible more than a few minutes.

There was no stool up to the time of his death. The urine had not begun to dribble away, nor had it become ammoniacal.

He did not sleep from the time of the accident, although often expressing a desire to do so. The breathing appeared easy from first to last. No unusual action of the sterno-mastoid or trapezii muscles was ever observed.

Examination, forty-eight hours after death.—The external surface of the body presented nothing remarkable. No displacement of the spinous process of any vertebra could be felt. The integuments and muscles were dissected from the whole length of the spinal column, and a fracture was then found running through the right side of the arch of the fourth cervical vertebra, very near the articular process. Under this a small clot of blood was found lying upon the theca, or extension of dura mater covering the cord. This covering was entire, and did not present any marks of inflammation. From the nature of the fracture, there was necessarily no displacement of the arch of the vertebra, and therefore no compression of the cord. The theca was next laid open: it

contained more serous fluid than usual. Opposite to the fracture the cord appeared swollen, as if from blood extravasated within it. Its remaining membranes were there more injected than usual. A section was afterwards made through this portion of the cord, as it was found that blood really was extravasated through its substance, appearing as innumerable red points, intimately mingled with the natural colour of the medulla. When the cord was removed, another fracture was detected, extending longitudinally through the body of the fourth cervical vertebra.

The brain was next examined. The vessels of the pia mater were unusually full, both veins and arteries. On the surface of the cerebellum, under the pia mater, there was a considerable quantity of blood extravasated, in very thin layers or streaks. The substance, both of cerebrum and cerebellum, was healthy.

On the fore part of the spinal column, opposite to the fracture, there was much extravasated blood. Thinking, from the great depression of the heart's action, that the superficial cardiac nerves might be compressed, Mr. Tyrrell dissected down to their origin, and found that they were involved in coagulated blood.

The lungs were filled with dark blood, as were the right chambers of the heart. The colon and rectum were filled with hard feces. The bladder and every other viscus were healthy.

LARYNGITIS.

Two Cases of Laryngitis, in which Bronchotomy was performed with success, at the GLASGOW ROYAL INFIRMARY.

CASE I.—A weaver, fifty years of age, was admitted on the 7th of November, 1827, with dyspnoea and difficult deglutition. The voice was much impaired; the air, during inspiration, produced in its passage through the upper part of the larynx, a loud, moaning noise, and at times a ringing sound; occasional paroxysms of violent cough, with copious but difficult expectoration of tough and yellowish sputum; part in front, and at the side of the thyroid cartilage, swollen, and tender upon pressure, the swelling extending in a less degree towards the cricoid cartilage and os hyoides; no discoloration of the skin; nothing unusual in the fauces or the epiglottis; pulse 120, feeble, and thready; skin cold; aspect pale and haggard; strength much reduced.

These were the symptoms; and it seemed that, six weeks before, without obvious cause, the complaint began by swelling around the thyroid cartilage, followed by throbbing pain in the part. In the course of seven days the pain was relieved, but difficulty of breathing and swallowing commenced, and during the last eight days had been urgent.

Leeches, and after them a blister, were immediately applied over the larynx, and a grain of calomel and the same amount of opium ordered to be taken every third hour.

At nine P.M. he was suddenly seized with dyspnoea so severe as

to threaten immediate suffocation; and this was still so urgent when Dr. COUPER arrived, that he forthwith proceeded to open the windpipe. On account of the swelling above the larynx, the opening was made below the cricoid cartilage, which procured instantaneous relief for the dyspnœa. The wound was kept open by a bit of curved wire. No further difficulty of breathing took place, excepting that once a severe fit of coughing was caused by a little milk escaping through the wound. On another occasion, also, accidental derangement of the wire produced a slight paroxysm; but, further than these, not the slightest inconvenience was felt after the operation. After a few weeks the wire was exchanged for a curved silver tube, about two and a half inches long, and one fourth of an inch in diameter, provided with two small rings, through which a piece of tape was passed, and tied round the neck, to retain the tube in situ.

"On the supposition that the contraction of the cavity of the larynx depended on thickening of its lining membrane, a mercurial course was prescribed, but apparently without benefit; for, although the patient continued to breathe easily so long as the wound was kept open, yet all attempts to make him breathe through the mouth alone proved ineffectual. On various occasions the wound was closed with adhesive plaster, to ascertain if any improvement had taken place, but it was invariably found necessary, at the end of a few minutes, to open the wound, and replace the tube, on account of increasing dyspnœa. At one time I entertained hopes of being able to dilate the contracted larynx, by bougies passed upwards through it from the wound; but the extreme irritability of the parts rendered this proposal impracticable. The introduction of even a probe through the wound into the larynx was found to excite such a paroxysm of coughing, that it was absolutely necessary to desist."

After remaining in the hospital above five months, the patient was dismissed, suffering no inconvenience except the necessity of breathing through the tube, a circumstance which habit had rendered very tolerable. By stopping up the tube with the point of his finger, he could speak in a hoarse but audible tone. In the month of August last he appeared at the Infirmary, and was perfectly free from all complaint.

CASE II.—This was a tobacco-pipe maker, aged twenty-eight, who was seen by Dr. Couper thirteen days after the commencement of the laryngeal inflammation. He had been bled pretty freely at different times, blistered, and treated with diaphoretic medicines; but still, though at times apparently relieved, the disease had proceeded on its march. When examined by Dr. C. he was just recovering from a fit of alarming orthopnœa, and presented these symptoms: incapability of assuming the horizontal posture; inspiration laborious and wheezing; fauces red and swol-

len; epiglottis enlarged, tense, and shaped like a glans penis during erection; uneasiness decidedly referred to the larynx.

"Laryngotomy was immediately agreed upon. In making the incision through the integuments, a small artery was cut, and bled very freely. At the same instant the dyspnœa became greatly increased; the patient's face became livid, his limbs quivered, and his urine was ejected involuntarily. Without waiting to secure the artery, I immediately perforated the thyro-cricoid membrane, and the transition from the state now described to easy respiration was nearly instantaneous. The patient's body being inclined forward, no inconvenience was felt from the bleeding, which was speedily stopped by the pressure of the wire employed to dilate the aperture. From this time he continued to breathe easily, partly by the wound and partly by the mouth, and swallowed without difficulty."

Four days after the operation the wire was withdrawn, and on the 15th the wound was so very nearly healed that even during coughing no air escaped by it. Nine days after this the patient had a rigor, followed by urgent orthopnœa, and a little pain and swelling of the right side of the larynx. After vainly employing a full dose of laudanum and antimonial wine, without relief, the larynx was opened a second time. In the course of ten days the wire was changed for a silver tube, which was kept in the wound for upwards of a month, and then withdrawn; shortly after which the wound was healed.

A few days after this he was discharged, affected with only a glandular swelling on the left side of the neck, which soon disappeared on his leaving the hospital.

"Both of these cases appear important: the former as an example of contraction of the larynx produced by chronic inflammation, and the latter as an instance of the same effect arising from acute œdematous laryngitis. The important fact that the dyspnœa, in cases of laryngeal disease, is liable to sudden and dangerous exacerbations, is well illustrated by both. Such paroxysms may cease after the irritability of the parts is exhausted, but they will certainly recur again and again, until suffocation is produced, unless an artificial opening is made into the windpipe, to allow a free access of air to the lungs. When the necessity for it ceases, the aperture can be easily healed up; and, even should the contraction of the larynx prove permanent, as in the case of Limpitlaw, it must be allowed that the inconvenience arising from breathing through a tube inserted into the windpipe, during the remainder of life, is small when compared with loss of a limb, to which few refuse to submit as a mean of prolonging life."

LITHOTOMY.

Extraordinary Case of a large oblong Calculus impacted in the Neck of the Bladder and Prostatic Portion of the Urethra, for the Extraction of which the Patient underwent two different Operations the same day. By F. BLANDIN, second Surgeon of the HÔPITAL BEAUJON.

A BOY, fifteen years old, was admitted into the Hôpital Beaujon, on the 1st December, 1828, who stated to M. Blandin that during the last five years he had habitually suffered considerable pain at the bottom of the abdomen above the bladder, and that its intensity was always increased by the exertions of walking, by the evacuation of the feces, and by micturition. The pain extended along the whole course of the urethra to the glans, in which part, indeed, it was most acute. The day of admission, the penis was in a constant state of semierecton, and the patient was frequently prompted, as it were instinctively, to grasp the part forcibly with his hand, in order to diminish the sensation of pain, from which he seemed to be scarcely ever free. His urine passed from him involuntarily and guttatim; the anus was encircled by a prominent hemorrhoidal band. He was frequently affected with diarrhœa, extremely emaciated, and his countenance indicated great prostration and suffering.

When Mr. B. introduced the catheter into the urethra, it occasioned such excessive pain that the bare idea of this operation threw the patient into a condition resembling the incipient stage of an intermittent fever. It was stopped, as soon as it arrived at the neck of the bladder, by a solid mass which appeared to be quite immoveably fixed in that part, and returned a distinct sound when struck. From these circumstances M. Blandin was of opinion that a very large calculus was situated in the bladder, in such a manner as to preclude the entrance to this viscus, by pressing its neck towards the perineum. This opinion was immediately afterwards strengthened, when, on introducing his finger into the rectum, he could distinctly feel the calculus through the parts interposing between the finger and the bottom of the bladder, which it had considerably depressed.

Accordingly, M. Blandin forthwith announced that it was his intention to adopt in this case the *high operation*, since he conceived the stone to be too large to allow of extraction by the lateral mode.

On the morrow (2d December,) Professor MARJOLIN, who examined the patient, coincided with M. B. in his general views of the case; fully admitted the necessity, likewise, of operating above the pubes; and pronounced that the calculus was situated

transversely, and in contact with both the tuberosities of the ischia.

The patient was ordered to bathe the whole body; to have an emollient clyster, a cataplasm to his abdomen; and to drink abundantly of almond emulsion.

This treatment was continued from the 1st to the 7th December, which was the day chosen for the operation.

After again verifying the existence of a stone in the bladder, by the introduction of the sound, &c. M. Blandin, in the presence of M. Marjolin, several other practitioners of eminence, and many students, proceeded to operate in the following manner:

He commenced by injecting some decoction of mallows through the catheter into the bladder, which admitted but a small quantity of the injection, owing to its contracted state. The catheter was now withdrawn, and an assistant was employed to press the sides of the urethra together, in order to prevent the fluid contents of the bladder from escaping through that canal. M. B. then, with a convex bistoury, divided the integuments of the hypogastrium in their centre, from above downwards, for the space of about four inches above the pubes. The linea alba was first divided near the pubes, whence the forefinger of the left hand being carried behind and upwards, the section was completed in that direction from within by the bistouri boutonné. Then the same finger being passed down through the wound to the anterior parietes of the bladder, was used to direct thither a straight pointed bistoury, with which this viscus was opened. But its muscular fibres were so much thickened by an almost constant state of contraction for some years, that several strokes of the bistoury were required to divide it sufficiently to allow the urine to escape freely through the wound. As soon as this was accomplished, a hook was inserted into its upper part, and a pair of small forceps carefully introduced by the guidance of a finger into the bladder, where they instantly reached and laid hold of the calculus, but could neither be made to retain their grasp, nor even so much as to move it in situ.

M. Blandin, therefore, withdrawing his instruments, examined the parts with his finger, and having discovered a middling-sized calculus which was lodged at the upper part of the bladder, he immediately extracted it with the forceps. He again endeavoured to remove the large calculus situated at the lowest part of the bladder, but to no purpose, though his efforts were seconded by those of an assistant, who attempted to elevate it by his finger in the rectum. The forceps, despite his utmost strength, could not retain their hold, and only brought away a few fragments of the stone; and, on again introducing his finger into the wound, M. B. found that the stone was quite as immoveable as at first, and also discovered that its small extremity alone projected into the cavity

of the bladder, whilst the greater portion of it was contained in a sort of sac, in which it was closely confined.

After that M. Marjolin and the other surgeons present had verified the above circumstances by personal examination, M. Blandin successively introduced a finger into the rectum, and a sound into the urethra, and thus tried, but in vain, to propel the calculus upwards and backwards. Then, by introducing a blunt instrument into the bladder, and carefully insinuating its extremity between the calculus and the sac which contained it, he endeavoured to raise and disengage the stone by using the instrument as a lever of the first kind, of which his finger formed the fulcrum. But although aided in this attempt by an assistant, who, having passed his finger up the rectum, employed considerable force simultaneously to effect the same purpose, it was only a little loosened, and its extrication from the artificial cavity in which it was impacted seemed no more likely to be achieved now, than at the commencement of the operation.

At this period of his exertions, M. Blandin, after consulting anew with M. Marjolin and the other experienced surgeons present, concluded that the exhausted state of the patient was unfavorable for the continuance of these fatiguing and unsatisfactory manœuvres; and he therefore determined to cut at once through the centre of the perineum, and to divide the neck of the bladder, with the adjoining portion of the rectum, in the hope that he might be thus enabled to thrust back the calculus.

M. Blandin, in order to effect this, passed the left forefinger up the anus, until it came in contact with the indurated tumor which depressed the bladder. Guided by this finger, he carried up to its extremity, with his right hand, a straight pointed bistoury, the point of which being then simultaneously elevated and withdrawn, effected in a single time, in a central direction, and with the greatest facility, the division of the neck of the bladder, the prostate, the forepart of the anus, and adjoining portion of the perineum. In this manner the stone was laid completely bare, and examined by the finger; and M. B. succeeded, but not without difficulty, in passing a large pair of forceps between the calculus and the cul-de-sac in which it was lodged. He renewed his endeavours to loosen and thrust it up towards the first incision; but, finding still an obstacle in this direction, he changed his plan, and, by employing an assistant to pass his finger through the wound of the hypogastrium, and to press the calculus from above downwards, he at length succeeded in pulling out the stone with the forceps through the opening in the perineum. It was an oblong calculus, hard, and of a crystalline appearance; it was nearly two and a half inches in length; its smallest diameter measured about an inch and a half, and it weighed two ounces.

Though the operation was long and fatiguing, yet the patient

lost very little blood, and, as soon as it was terminated, he was conveyed back to his bed.

Symptoms of peritoneal inflammation soon came on, which resisted the treatment employed, and the child died the third day from the operation.

From the appearances detected on dissection, it was very evident that the patient had died from infiltration of urine in the cellular tissue, and from inflammation of the peritoneum. M. Blandin suggests that this fact alone is important, as it militates against the opinion of those who declare "that peritonitis never occurs from causes acting upon its external surface." He candidly expresses his apprehension that the closure of the wound in the hypogastrium by adhesive bandages had, to a certain extent, favored the urinous infiltration. The efforts which were made by nature, after the operation, to discharge the urine by the wound, confirm this opinion. This disadvantage was quickly detected, and the bandages were removed, and a seton was passed between the wounds in the hypogastrium and the perineum, to facilitate the exit of the urine. The incision in the perineum had left untouched the neck of the bladder, and hence the difficulty of an escape of urine from this part.

CONTRACTED AORTA.

Case in which the Aorta was nearly Impervious. (LA CHARITÉ.)

SEVERAL instances of remarkable contraction of the aorta are mentioned by medical writers, and two cases have been recorded in which its canal was quite obliterated. One of these is detailed by GRAHAM, of Glasgow; the other was inserted in the 33d volume of CORVISART's Journal.

A shoemaker, ninety-two years old, was admitted into La Charité, June 19th, 1827. He was short, rather thin, and his head small. His intellect was too weak to enable him to give a satisfactory account of his former state of health: however, he affirmed that the right side of his mouth, and the corresponding arm, had been paralysed. When relating this he could use both arms equally well; but the right appeared slightly bent, as in adduction. His head was habitually bald; the temporal arteries beat powerfully; the pulse was hard, frequent, and regular; the skin hot and dry; the tongue dry and horny; notwithstanding which, he was constantly asking for food. He was at first constipated, and after some time very relaxed. Nothing peculiar could be discovered in his respiratory organs, saving that percussion below the right produced a more obscure sound than below the left clavicle.

From constantly lying on the back, the integuments of the most prominent part of the sacrum ulcerated; and the patient, after a protracted abode in the hospital, gradually sunk, without presenting any thing else worthy of notice.

His body was opened four-and-twenty hours after death. A small quantity of opaque serosity was found between the arachnoid membrane and pia mater, which were, however, removed with great facility. Both the hemispheres of the brain, and particularly the left, exhibited numerous traces of former apoplectic extravasations of small extent, and of which some were deep-seated and others situated superficially. The most considerable extravasation was in the substance of the left corpus striatum. An alteration which was observed in several spots of the exterior of the brain presented these characters: The gray substance was wanting to a greater or less extent, while the arachnoid membrane corresponding to it was entire. Underneath this membrane was a superficial erosion, at the bottom of which was a thread-like cellular membrane, yellow as ochre, and injected with a small quantity of milky serum. The small depressions indicating the destruction of the cineritious substance were either lined by a yellow cellular membrane, injected with serosity of the same colour, or by a smooth transparent membrane containing a thin serosity. The other parts of the brain exhibited no unusual appearance.

The heart was of the ordinary size. The internal membrane of the left ventricle was somewhat thickened, and in colour resembled milk. The sigmoid valves were in several parts incrustated with an osteo-calcareous matter.

The aorta, at its origin of about its usual circumference, very soon gave off the arteria innominata, the caliber of which was much larger than natural. After furnishing this branch, the aorta became much smaller, took an oblique direction upwards and towards the left carotid, which it gave off, and then, bending itself backwards at an acute angle, descended, exhibiting a slight enlargement. It now gave off the left subclavian, which was also much enlarged at its origin, and speedily took a perpendicular direction, and was sensibly smaller before any branch came off from it. The aorta forthwith presented a most conspicuous circular contraction, and very similar to that which a tight ligature would produce; then resuming its proper size, it had a slight dilatation, which produced an evident curvature towards the left side. The caliber of the aorta, in its course down the abdomen, appeared unnaturally small, particularly towards the lower part; and the size of the external iliacs was not in proportion to the bulk of the inferior extremities.

At the termination of the right subclavian, which was much augmented in size, several large arteries were given off. The transversalis scapulæ and cervicalis posterior, each nearly as large

as the humoral artery, ran in the usual direction, but were remarkable for the thickness of their coats and their numerous sinuities. The first preserved its caliber undiminished, until it arrived at the angles of the fourth and fifth ribs, between which it penetrated, furnished their anterior and posterior intercostals, crept along under the pleura for a short space, and, forming a continuation with an intercostal artery, terminated in the aorta, about half an inch above its contraction.

The cervicalis posterior, taking a more limited course, and descending more directly along the upper and hinder part of the back, was divided into three large branches, which, after separately penetrating into the thorax between the first four intercostal spaces, and supplying the corresponding ribs with their respective arteries, reached the aorta, into which they poured their contents through three large orifices.

Similar peculiarities were observed on the left side. The transversalis scapulæ and the cervicalis posterior, somewhat smaller, but taking the same course, penetrated into the chest likewise, and terminated in the left side of the aorta, below the contracted part. On this side it was also remarked that the superior intercostal, arising from the subclavian, communicated with the second aortic intercostal.

The right and left internal mammeries were very large, their diameters exceeding that of the humeral. Both of them, after running their usual course, and becoming a little narrower towards the inferior part of the thorax, again increased considerably in size, became very tortuous; then uniting with the epigastric, and forming with it a common trunk, surpassing in magnitude that of the external iliacs, terminated in the crural artery, whose diameter it considerably augmented.

The coats of the aorta presented no trace of diseased structure barring a few insulated spots where they appeared to be slightly thickened. Near the contracted part, too, the coats seemed to be equally sound. The stricture had the form of a regular circle interiorly, and the diameter of its bore was no larger than a crow-quill.

CRITICAL ANALYSES.

Quæ laudanda forent, et quæ culpanda, vicissim
illa, prius, cretâ; mox hæc, carbone, notamus.—PERSIUS.

Elements of General and Pathological Anatomy, adapted to the present State of Knowledge in that Science. By DAVID CRAIGIE, M.D.—8vo. pp. 816. Adam Black, Edinburgh; Longman and Co. London. 1828.

ALTHOUGH we are by no means inclined, with some writers, to estimate the practical utility or skill of a physician by his knowledge of morbid anatomy, we are too sensible of the many important advantages that have been derived from a zealous attention to this department of medical science, to consider it as one that the practitioner can negligently pass over without compromising his own reputation, and endangering the safety of those who may be committed to his charge. It must, however, and it ought to be, confessed that he who may very correctly predict the remote effects of disease may be but very imperfectly acquainted with the best mode of arresting its progress while it is yet under the guidance of our art. It is equally true that many very important and destructive maladies depend upon functional derangement alone, and leave no physical traces which can be detected by the scalpel of the most accurate morbid pathologist. Highly important, then, as may be a perfect acquaintance with these alterations of structure which are caused by disease, we can neither consider morbid anatomy to be the most essential, or the first subject which ought to occupy the attention of the student, whose future life is to be devoted to the cure of disease. Let him first earnestly investigate the healthy actions of the system, then watch the primary symptoms and ordinary progress of disease; let him as carefully attend to the effects of the remedies he prescribes. When he has made himself master of these important subjects, he may apply himself to the study of morbid anatomy, and he will find it, at least, a very useful auxiliary to the information he has previously obtained. We cannot assign to this branch of our science a higher rank, and we consequently differ from those ancient and modern authorities who declare that it is the "basis of all medical skill." They give to morbid anatomy the station which physiology ought to occupy; for physiology must be considered the foundation of practical medicine.

The author of the volume before us is guided by this principle. We are led from the consideration of healthy to diseased structure, by concise yet perspicuous preliminary descriptions of the various organic tissues in their normal condition. This plan, in our opinion, very naturally enhances the value of the work.

Dr. CRAIGIE very truly observes, that the information which has been recorded upon the subject of morbid anatomy is scattered through so many volumes, that they can scarcely be consulted even in a cursory manner. So great is the accumulation of materials, yet so dispersed and multiplied, that the most intrepid diligence is disconcerted, and the most indefatigable perseverance exhausted.

"To alleviate, if not to remove, some of these difficulties, the most obvious plan is to classify the principal facts which it is important for the student to know; to reduce to general heads the numerous, isolated, and not unfrequently unarranged facts, recorded by different observers; to reconcile what is discordant; to explain what is anomalous; to distinguish the essential from the accidental, the important from the trivial; and to exhibit in a connected and systematic shape those deductions and inferences which are justified by accurate analytic comparison of the best authenticated facts. Though these are the objects which have been held in view in the composition of the present volume, it can only be determined by others with what success they have been attained." (*Preface*, p. vii.)

As the basis of arrangement, Dr. C. has chosen the distinctions of the component tissues of the animal body, as derived from the similitude and difference of their anatomical characters. The advantages of this method, he says, have been previously recognized by the high authorities of John Hunter, Carmichael Smith, Bichat, Dr. Thompson, and Beclard; but still no complete system of pathological anatomy has hitherto been constructed according to its principles. In describing the pathological changes incident to each tissue, it has been his study not so much to speak from personal observation, as to generalize with fidelity the results of the researches of others. In adducing the testimony of other observers, he has very prudently not run the risk of perpetuating error, by assuming as proved that which he himself has not had the opportunity of verifying. Of every morbid change described, the description is derived, in some instances, from repeated inspection; in all, from more or less personal examination of its physical and anatomical characters.

With a degree of sincerity which does not mark every

prefatorial chapter, Dr. C. tells us what his book does not contain, as well as what it does.

"On one department of pathological anatomy, the reader will find little or no information in the present volume. I allude to local diseases, and to those varieties of malformation which consist in misapplications of the component parts of organs. These, it is almost superfluous to remark, cannot, without violation of the principles of arrangement, be introduced in a work on general anatomy; and I have, therefore, however reluctantly, excluded them almost entirely, unless so far as their general characters could be stated." (*Preface*, p. xii.)

On ordinary points, on which pathological opinion is unanimous, the author has been "sparing of reference, or omitted it entirely. The authorities referred to in illustration of various points of discussion, are selected from the most useful and most accessible."

It must evidently be impossible for us to enter into a deliberate consideration of every part of a work consisting of nearly a thousand pages. We can only convey to our readers an opinion of the whole by a selection of some of the most interesting parts.

Chapter i. *Division of the Textures*.—The progressive improvements that have been made by various distinguished writers on anatomy, are briefly mentioned. BICHAT is to a certain extent deprived of the laurels which have hitherto been yielded to him. Dr. Craigie states that in the time of the elder HUNTER and CULLEN, general anatomy received very valuable contributions from an ingenious foreigner, ANDREW BONN, of Amsterdam. In his inaugural dissertation, contained in Sandifort's collection of Theses, which was published at Rotterdam in 1769, Bonn treats on the membranes and the structure of the skin, and, says our author, "it is an example of the capricious nature of scientific reputation, that, while the work of Bichat, which was published forty years after, though little more than the thesis of Bonn expanded, has given to its author an imperishable name, the small treatise of Bonn is equally unknown and unregarded, and has scarcely served to rescue his name from utter oblivion." (P. 11.) We confess we know nothing of Bonn's work. The statement of Dr. Craigie is doubtless correct. It is obvious, however, that the allegation of resemblance does not necessarily involve the charge of plagiarism. Each probably drew from nature, and hence the similarity of the portraits they have presented.

In the brief view which our author takes of the organic

tissues, he does not adhere entirely to either of the arrangements of previous pathological classifications. He modifies that of Bichat, which is perhaps the least objectionable, by adopting as many of the suggestions of his commentators as the nature of the subject and his personal observation may seem to authorize. The term "cellular membrane" is not correct in the opinion of Dr. C.: he proposes the adjective *filamentous*, as more appropriate. The filamentous tissue, then,

—"may be described as a substance consisting of very minute thready lines, which follow no uniform or invariable direction, but which, when gently raised by the forceps, present the appearance of a confused and irregular network. As these minute lines cross each other, they form between them spaces of a figure not easily determined, and perhaps not uniform. By some authors these spaces or intervals have been named cells; but, accurately speaking, the term is not fortunately applied. The component lines, which do not exceed the size of the silkworm threads, are so slender, that they do not form those distinct partitions which the term cell implies; and though, by forcible distention, such as takes place in insufflation or separation by forceps, cavities appear to be formed, these, it will be found, are artificial, and result from the separation of an infinity of the slender filaments of which the part is composed. These interlinear spaces necessarily communicate on every side with each other; and indeed the most distinct way of forming a true idea of the structure of the cellular tissue, is to suppose a certain space of the animal body which is divided and intersected into an infinite multitude of minute spaces (*areolæ*), by slender thready lines crossing each other." (P. 24.)

In the adoption of this term, which he selected from personal observation and reflection, the author finds that he has been anticipated by C. B. DE BERGEN, whose anatomical accuracy he highly eulogizes.

If an incision is made into the filamentous tissue in the living body, it is found, if we except those fluids which issue from divided vessels, that nothing is observed to escape but a thin exhalation or vapour, which is evidently of an aqueous nature. By some authors this has been termed *cellular* serosity, from its resemblance to the serous part of the blood. Its quantity has been greatly exaggerated. In the living body it appears not to exist as a distinct fluid, but as a thin vapour, which communicates to the tissue the moist appearance which it possesses.

"This fluid is understood to be derived from the minute colourless capillaries named exhalants; and it is supposed to be no sooner poured forth in an insensible manner, than it is removed by the absorbing power either of lymphatics, according to the fol-

towers of the Hunterian hypothesis, or of minute veins, according to Magendie. It is of no great moment whether this process of absorption be ascribed to lymphatics or to veins, or be understood (as is probably the truth) to be effected by both. It is sufficient to remark, that whatever serous fluid is secreted into the interstitial spaces or cells of the filamentous tissue makes no long abode in that situation, but in the healthy state is speedily removed; so that, if we suppose exhalation, absorption must be also admitted; and the filamentous tissue is therefore represented as the seat of an incessant exhalation and absorption." (P. 26.)

It does not appear that the nervous twigs, observed to pass through the filamentous or cellular tissue, are lost in it. In general they have been traced to some contiguous part. The extensive distribution of the subcutaneous filamentous tissue, the mutual connexion of its parts, and its ready communication with the filamentous tissue of the mucous and serous membranes, have been demonstrated by HALLER, W. HUNTER, and BORDEU; and have been clearly explained by PORTAL and BICHAT. The following principal points are worthy of attention:

"The filamentous tissue of the head and face communicate freely with each other, and with that of the brain by the cranial openings, and with the submucous tissue of the eyelids, nostrils, lips, and the inner surface of the mouth and cheeks. It communicates also with the subcutaneous tissue of the neck all round; and at the angle of the jaw, in the vicinity of the parotid gland, is the common point of reunion. To this anatomical fact is referred the frequency of swellings and purulent collections in the region of the parotid, in the course of various diseases of the head, face and neck.

"The filamentous tissue of the neck may be viewed as the connecting medium between that of the head and trunk. From the former region it may be traced downwards along the back, loins, breast, sides, flanks, and belly. At the cervical region, and between the shoulders, it is dense and abundant; and, surrounding the dorsal part of the vertebral column, it is connected with the mediastinal tissue, the submucous tissue of the lungs, and the subserous tissue of the costal pleura. At the fore part of the neck it is in like manner connected with the abundant tissue of the pectoral region, and by means of that surrounding the larynx and trachea, 1st, with the submucous tissue of the bronchi, and, 2d, with the anterior mediastinum. Passing downwards, the same communication may be traced with the intermuscular tissue of the loins and belly, the tissue surrounding the lumbar and sacral portion of the vertebral column, that connecting the mesentery and large vessels to the vertebræ, and extending all round under the muscular peritoneum, and into the pelvis, where, by means of the tissue at the posterior surface of the abdominal muscles, at the

anterior surface of the iliacus internus, and through the obturator hole and ischiatic notch, it communicates with the filamentous tissue of the lower extremities. From the rectum and branches of the ischium it is continued along the perineum by the urethra, and into the scrotum.

"In the whole of this course it is abundant in the space before the vertebræ, round the *psosæ* and *iliacus internus* muscles, and round the bladder, rectum, prostate gland, and womb. The tissue surrounding the vertebral column communicates with that in the interior of the column by the intervertebral holes.

"The armpit may be considered as the point of union between the filamentous tissue of the trunk and that of the upper extremities, while the groin is the corresponding spot for the lower extremities. These facts should be kept in mind in observing the phenomena of diseases of this tissue.

"Notwithstanding this general connexion, however, certain parts of the tissue are so dense and close as to diminish greatly the facility of communication. Thus, along the median line it is so firm that air injected invariably stops, unless impelled by a force adequate to tear open its filaments; and water is rarely found effused in this situation. In the neighbourhood of some parts of the skeleton, also, as at the crest of the ilium, over the great trochanter, and on the shin, the filamentous tissue is very dense and coherent." (P. 30.)

The filamentous tissue is liable to inflammation, acute and chronic, circumscribed and with exudation of lymph, or diffused and spreading, generally without this exudation, and with the production of purulent matter; to induration; to hæmorrhage; to serous infiltration; to aerial distention, and to new growths. Upon each of these morbid conditions Dr. C. offers many very instructive observations.

The adipose membrane which has frequently been confounded with the filamentous tissue, under the general name of cellular membrane, adipose membrane, and cellular fat, was distinguished and positively described by BECLARD. Some obscurity hangs over the morbid alterations of this structure.

"In females and in eunuchs it is more abundant than in males. In females deprived of the ovaries it is more abundant than in those possessed of these organs; and it is well known that sterility is frequent among the corpulent of both sexes. In some circumstances this accumulation may be so great as to constitute disease, (*Polysarcia adiposa*; Cyrilli, Sauvages, Cullen, and Good;) and in other circumstances the deposition of fat is a means which the secreting system seems to employ to relieve fulness and tension of the vessels, and, if not to cure, at least to obviate morbid states of the circulation. (Parry.) Accumulations of fat are said to take place in some animals in a few hours in certain states of the atmo-

sphere. During a fog of twenty-four hours' continuance, thrushes, wheatears, ortolans, and redbreasts, are reported to become so fat that they are unable to fly from the sportsman. (Bichat.)" (P. 63.)

The diminution or disappearance of fat is much more frequent than its extraordinary abundance, and depends upon various causes, which the author mentions. The removal of fat from its containing membrane is effected by the process of absorption, the agents of which some suppose to be the lymphatics; others ascribe it, at least in some measure, to the influence of minute veins.

"It is a point of some interest to know in what form it is absorbed, whether as oily matter, or after undergoing a process of decomposition. The observation of Dr. Traill would lead to the former view; but it is not easy to conceive that this should be uniform. We want, in short, correct facts on the point at issue." (P. 66.)

The adipose membrane is also the frequent seat of that singular change termed melanosis.

"The black or melanose matter is found in the subcutaneous adipose membrane and the subjacent cellular tissue of the chest and belly; it is not uncommon in the fat of the orbit; it is very commonly seen in the adipose cushion on the fore part of the vertebral column, that surrounding the kidneys, and in the fat of the anus and rectum; it is found in the anterior and posterior mediastinum; and it is found between the folds of the mesentery, of the mesocolon, and of the omentum. It is also found in the substance of the marrow of bones; and perhaps in most cases in which the osseous system appears to be stained with the melanose deposit, the dark matter may be traced to the medullary particles, the situation of which it is found accurately to occupy.

"In all these situations it appears in various degrees of perfection, and in different forms. It may be disseminated in black or inky spots through the adipose membrane; it may be accumulated in spherical or spheroidal masses of various size and shape; or it may be found in the form of brown or ebon-coloured fluid or semi-fluid, enclosed in a cyst formed of the contiguous tissue, more or less condensed.

"The melanose matter is entirely destitute of organization, and is to be regarded as the result of a peculiar secretion. No vessels have been traced into it; and, when bodies affected with this deposit are minutely injected, the vessels can be traced no farther than the enveloping cyst. (Breschet.) It is also to be noticed that it is never deposited exactly in the site of organic fibres, but always between them, and very generally in the precise situation of the adipose particles. These several circumstances show that the melanose disease consists not in a degeneration or conversion into another substance, but in the deposition of a new form of matter, in the manner of a secretion.

"In what form the melanose substance is first deposited, we have few accurate facts to enable us to form a judgment. Laennec is of opinion that it is first deposited in a solid form, and afterwards becomes fluid. The former he considers the stage of crudity, the latter that of softening (*ramollissement*). Several facts, however, would lead to the conclusion, that when first deposited it was fluid, and afterwards acquired consistency. Thus, in several dissections performed by Dr. Cullen and Mr. Carsewell, the matter of the small tumors, which are supposed to be of short duration, were found to be softest, and sometimes as fluid as cream. In like manner, in a case recorded by M. Chomel, in which the disease was found in the liver in the shape of large cysts, the melanose matter was more fluid in the centre than in the circumference of the cysts. Upon the whole, if the melanose deposit be, as is supposed, an inorganic secretion, the idea of its being poured forth from the vessels at first in a fluid or semifluid state is most probable, and most consistent with the usual phenomena and laws of animal processes." (P. 68.)*

In Chapter iv. we have a good description of the structure of arterial tissue. Dr. Craigie has repeatedly examined almost every considerable artery of the human body, and has never been able to recognize any longitudinal fibres either in the middle or proper coat, or in their internal membrane, as taught by WILLIS, DOUGLAS, and DE LA SÔNE. It is said by Bichat, that the arteries derive their nerves almost exclusively from the ganglions and the gangliar nerves.

"The inference does not rest upon strict observation, and evidently owes its birth to the hypothetical opinions of this ingenious physiologist. All the arteries going to the extremities, the axillary and iliac, and their branches, receive nerves from the neighbouring nervous trunks, which are formed chiefly from cerebral or spinal nerves, and have no immediate connexion with the system of the ganglions. In the internal carotid and the vertebral arteries, and their branches, nerves cannot be distinctly traced." (P. 79.)

To ascertain the several modes in which arteries terminate, has always been a problem of much interest to the physiologist, and great difficulty to the anatomist.

"1. The first undoubted termination of arteries is immediately in veins. It is unnecessary to adduce in support of this fact the long list of observers enumerated by Haller. It is sufficient to say that it was clearly established by the microscopical observations of Leuwenhoeck, Cowper, and Baker, by Haller himself, and

* The 32d volume of the Dict. des Sciences Medicales, page 183, contains a brief yet interesting account of this morbid change.—REV.

by Spallanzani in his beautiful experiments on the circulation of the blood.

" 2. The second termination which may be mentioned here is that into the colourless artery, (*arteria non rubra.*) This is sufficiently well established by the phenomena of injections.

" 3. A third termination which is supposed to exist, but of which no sensible proofs can be given, is that into colourless vessels supposed to open by minute orifices on various membranous surfaces, and therefore termed exhalants." (P. 85.)

The nature of the exhalants is subsequently considered.

HALLER admits a termination in, or communication with lymphatic vessels, but allows that it is highly problematical.

In describing the alterations produced by disease in the arterial structure, Dr. C. remarks that "a red or crimson staining of the inner membrane, especially in the aorta, has been mentioned by Corvisart, Frank, Hodgson, and Laennec, and may be often seen in persons who have died without symptoms of pectoral or arterial disorder. Its nature is not well known. It seems to be the effect of a dying or tinging property of the blood, either during the last moments of life, or after the heart has ceased to beat. It must not be confounded with inflammation or its effects." (P. 89.)

The subject of aneurism is too important to have been so cursorily touched upon as it is by our author.

The nature of the calcareous depositions to which arteries are liable has given rise to various speculations.

"But this variance has partly arisen from the practice of confounding it with the steatomatous deposition. It is said to differ from osseous matter in two circumstances: First, the deposition is earthy from the first, without any previous matrix of animal matter; secondly, it is destitute of the usual fibrous structure, and presents an irregular but homogeneous crust without any obvious arrangement. It consists, however, of the usual combination of animal matter and bone earth. A specimen analyzed by Mr. Brand gave 65.5 parts of phosphate of lime, and 34.5 of animal matter in the 100 parts. The latter was chiefly albumen, with traces of gelatine." (P. 93.)

It has been said by SCARPA that the steatomatous deposition in the arterial tissue proceeds invariably to ulceration. Dr. Craigie, however, assures us that this is not an invariable result; for a large portion of an artery may be affected with it without suffering the smallest breach of continuity or destruction of tissue.

The ensuing chapter treats of the venous tissue. We must pass over the anatomical description of veins. It is

worthy of observation that Bichat has remarked that the osseous or calcareous depositions, which are common in various spots of the inner arterial membrane, and especially at the mitral and aortic valves, are never found in the inner venous membrane, or at the tricuspid valve, or in the semilunar valves of the pulmonary artery. Dr. Craigie suggests, as a question, whether these depositions have been found inside the pulmonary veins, and not inside the pulmonary artery?

Venous tissue is liable to inflammation, adhesive or circumscribed, and spreading, generally suppurative; to *varix*, to osseous deposition, and to the formation of concretions. The subject of spreading inflammation of the venous tissue is passed over much too briefly. The dangerous nature of this affection of the veins, and the many highly interesting points connected with it, which still require investigation, claim the most serious attention.*

The *system of capillary vessels, terminations of arteries, and origins of veins*, are described in the next chapter. The author very correctly states that, although the term "capillary system" is constantly used, it is neither precisely defined nor distinctly understood. According to Bichat, it is not only the common intermediate system between the arteries and veins, but the origin of all the exhalant and excreting vessels. To this doctrine Dr. Craigie replies, that "if we consider the modes in which arteries have been said to terminate, and veins to take their origin, we shall find that, in this view of the capillary system, there are some things which are doubtful, and some which are inconsistent with the rest."

"Of the different kinds of terminations assigned to arteries, and of origins assigned to veins, one only admits of sensible and satisfactory demonstration. Arteries, when they have so much diminished as to become capillary, are seen by the microscope, in some instances by the naked eye, to pass directly into corresponding capillary veins, or to end abruptly in some organ or membrane unconnected with any other vessel. It is likewise certain that the microscope shows every capillary vein to arise from a capillary artery; and, if there be any other mode of origin, it has not yet been demonstrated or established. Only one other circumstance

* Mr. ARNOTT, in the very excellent paper which he lately presented to the Medical and Surgical Society, has, we think, very satisfactorily shown that some of the doctrines admitted by Dr. Craigie, and indeed generally acknowledged, are inaccurate. Mr. Arnott's communication will, of course, be published; and we shall not fail to convey to our readers the original opinions he has derived from a most industrious and judicious selection of facts.—REV.

requires to be taken into account in this inquiry. This is, that the capillary artery and vein may contain either red or colourless blood; for, according to the size of the vessels, and the nature of the organs or tissues in which they are distributed, the blood which flows through them will be coloured or colourless. This view of the communication of minute arteries and veins, which is perfectly consistent with the known facts, will afford the only explanation which it is possible to give of the singular division of the capillary system which Bichat has chosen." (P. 136.)

There is no precise point at which the arterial tissue or structure can be said to terminate, and none at which the venous structure can be said to commence. By some a direct communication of minute arteries and veins is denied. The organic properties of the capillary vessels are as little known as their structure. Many physiological and pathological writers, especially experimentalists, have ascribed to them a power which has at different times been called muscular, tonic, irritable, contractile, and have asserted, Dr. Craigie remarks, "that, because the larger arteries are provided with a fibrous membrane, which they have called muscular, and to which they have ascribed irritability, or the power of contraction when stimulated, their minute or capillary terminations must have the same property. This conclusion is completely unfounded, for two reasons: First, I have already shown that the proper arterial tunic is not muscular in structure, and, according to the best experiments, possesses no property of contraction when stimulated. Second, although it be admitted that the proper arterial tissue is muscular and irritable, it is quite certain that observation has not hitherto shown that this tunic can be recognized in arteries smaller than a line in diameter; and it is certain that in the capillaries, properly so called, (that is, in the vessels which partake of the nature of artery and vein,) no such structure has yet been observed." (P. 140.)

We are not acquainted with any physiological or pathological writers who have *thus* assumed the irritability of the capillaries. The evidence upon this subject is not presumptive. That the capillary vessels are endowed with the only kind of vital action with which we are acquainted, namely contractility, has been demonstrated by the experiments of HASTINGS and WILSON PHILIP. It would be easy to adduce the authority of other experimentalists. To accumulate proofs, however, must be unnecessary; for the experiments of Hastings, to which alone we have an op-

portunity of referring, are not to be resisted.* Dr. Craigie is of opinion that the conclusion drawn from these experiments, as well as from those of HUNTER and THOMPSON, is not satisfactory.

"The effects which the application of mechanical irritants, or chemical substances, as alcohol, acids, and alkalis, produced in the experiments of Hunter, Wilson Philip, Thomson, and Hastings, have been supposed to demonstrate the irritable nature of the capillary vessels. The conclusion is illegitimate, in so far as the results of these experiments are open to several sources of fallacy. In some instances these effects are to be ascribed to incipient inflammation; in others, to shrivelling of the capillary structure, or crispation by chemical action; in others, to actual coagulation of the blood of the capillaries; but none of them prove satisfactorily or precisely any peculiar properties in the vessels of which the capillary system is composed." (P. 142.)

In our opinion, the experiments referred to prove to conviction the point in dispute. We do not conceive, with Dr. Craigie, that the results are either equivocal or uncertain. It signifies but little, or indeed nothing, for the argument, whether the coats of arteries are muscular in structure or not. We do not deem it necessary to enter upon this oft-disputed and still disputable point. That the blood-vessels are endowed with a vital power of contractility, resembling that of the muscles, and therefore called muscular, we think is clearly established. The term *tonicity*, suggested by Parry, is perhaps preferable, as it is less likely to perpetuate a mere verbal dispute. Dr. Craigie appears to have looked for muscular structure where he was least likely to detect it, viz. in the *considerable* arteries of the human body. The irritability of arteries is in an inverse ratio to their size, and consequently the existence of this property should be sought for in the small or capillary vessels.

The morbid deviations incident to the system of capillary vessels are of the utmost importance. They are the main agents of most of the healthy processes of the animal body, and there are few morbid states in which their operation is not primary, or of which they do not more or less partake. Numerous opponents may be found to the doctrine conveyed in the following passage: we think it is correct.

"Upon the whole, two facts may be considered to be established regarding the state of the capillary vessels of an inflamed part.

* An account of these experiments is prefixed to Dr. HASTINGS' excellent treatise "on Inflammation of the Mucous Membranes of the Lungs."

The first is, that these vessels are unnaturally and unusually distended, and really contain more blood than in the state of health. This is proved not only by incisions into inflamed parts, but by dissections of every part and organ of the body. The second is, that the blood moves more slowly in these vessels than in the healthy state, and even after some time may remain entirely motionless. This is also established by observing the effects of inflammation in the human body, but especially by the phenomena of inflammation excited artificially in the bodies of the lower animals." (P. 147.)

It is still a point to be ascertained, whether these two conditions constitute the essence of inflammation. It is equally undetermined by what agency these states are induced in the capillary system of any tissue or organ.

We cannot dwell upon the description given of the various morbid conditions of the capillary vessels, although it is worthy of attentive perusal.

In the second section of the thirteenth chapter, we approach a very important part of pathological study, namely, *diseased conditions of the brain*. It is mortifying, but it is very true, that, notwithstanding the vast labour that has been expended upon the anatomy and pathology of this organ, we possess but few positive facts relative to either, which can instruct us as to the origin of its diseases, the symptoms which different lesions produce, or the treatment which they may require. Knowledge which is worth acquiring is rarely obtained without determined perseverance: we must not, therefore, abate our diligence because it has been as yet but scantily rewarded.

Dr. Craigie differs from the opinion of Dr. ABERCROMBIE and other pathologists respecting *ramollissement* of the brain. He does not conceive that this condition is of the nature of gangrene in other parts. "A part of the brain changed as above described is indeed disorganized, may be said to be dead, and in this sense the change may be termed *gangrene of the brain*. But when it is found in different degrees, and in so many different morbid states of the brain, some of them of long continuance, it is difficult to be satisfied that every one of them must be viewed equally as gangrene." (P. 383.)

The effects of this disease on the system are not very well distinguished.

"They may be divided into common and proper. The common effects are dull pain, or sense of weight in the head, dulness, impaired memory, frequent drowsiness, and occasional peevishness at trifles, and paralytic affections of the face, head, and members. The proper effects are sense of formication, numbness, and rigidity, or occasional involuntary contractions of the muscles of the

upper extremities, followed by delirium or fatuity, and a peculiar odour about the head, not dissimilar to that of the mouse. In the spinal cord it gives rise to numbness and rigid contraction of the muscles of the lower extremities, and eventually palsy, more or less complete.

"These symptoms, which are chiefly those given by the French authors already mentioned, apply to the acute form of the disease. In more chronic states, it seems not to affect the muscular motions considerably, but rather to induce fatuity, and other forms of impaired intellect. This inference at least results from some of the observations of Morgagni, and those of Mr. John Hunter. This is the state of brain which takes place in cases of fatuity succeeding coup-de-soleil." (P. 384.)

Suppurative inflammation frequently takes place in various parts of the brain. One variety of cerebral abscess is connected with discharge from the ear. "Purulent discharge from the ear-hole is indeed generally connected with inflammation, subacute or chronic, of the dura mater, or vascular membrane, or both; and in some instances the disease takes an unfavorable turn in this manner, and speedily proceeds to a fatal termination." We would alter the word "generally" in this passage for "sometimes." In children, particularly, we frequently see discharges of pus from the ear, especially if there is any eruptive disease upon the scalp, when their health does not materially suffer either during the progress, or at the subsidence, or cure of the cutaneous malady. In such cases we cannot suppose that inflammation of the meninges of the brain has existed.

Dr. Craige conceives it legitimate to infer that the essential anatomical character of apoplexy is injection of the vessels of the brain, more or less general. This may terminate in one of two modes, both of which are accidental and accessory. The first is effusion of serous fluid; the second is effusion of red blood. "If from any cause the circulation within the head becomes unusually slow, and the vessels of the brain become inordinately distended, either red blood or serous fluid is poured out from the extremities of the arteries. The latter process, if we admit the testimony of Cheselden, Morgagni, and Willan, takes place in the slow and gradual drowsiness and stupefaction which distinguish the form of the disease termed lethargy, (*veternus*.) The cause of the symptoms, however, is not the effusion, as Willan imagined, but the general vascular distention and injection from which the effusion arises." (P. 402.)

The state of the cerebral vessels which terminates in hemorrhage may occur, perhaps, at any period of adult

life. But these blood-vessels are liable to a peculiar state which predisposes to extravasation.

"This consists in deposition of earthy matter between the coats of the internal carotid arteries and of the basilar artery, and their branches. In consequence of this deposition, they lose part of their contractile and distensile powers, and some of their tenacity, and whenever blood is accumulated in unusual quantity, as they do not so readily admit of distention, rupture is the consequence. (Baillie, 454.) Hodgson also shows how generally this morbid state of the cerebral arteries is connected with extravasation.

"This cause, however, is predisponent only. A fit of apoplexy may occur, and prove fatal, in persons in whom neither ossification of the arteries of the brain, nor any other state, except mere vascular injection, is found. And, on the other hand, the cerebral arteries may be ossified or steatomatous in many persons who have never had a single fit of apoplexy. The general result of the cases observed by Vater, Morgagni, Cheyne, Howship, Rochoux, Serres, and Tacheron, is, that disease of the arterial coats is connected with vascular injection, which may terminate, according to circumstances, in serous effusion, pulpy destruction, or bloody extravasation. It is a well-established fact, however, that the extravasation does not take place from the diseased arterial trunks, but from the minute capillaries in which these arteries terminate." (P. 412.)

Old age is attended with two circumstances which predispose to apoplexy. The first is the venous plethora so ingeniously maintained by Cullen. The second is the tendency which the arterial system more especially betrays to become diseased after the meridian of life. According to the present state of evidence, the author thinks it wisest to adopt the opinion of those who do not recognize that species of apoplexy to which the term "nervous" has been applied.

Palsy is supposed to depend on the same state of the cerebral capillaries which causes the general apoplectic affection, which it either precedes, accompanies, or follows; or on that state of the brain or spinal cord which terminates in pulpy destruction. In attempting to establish clearly the anatomical characters of palsy, two circumstances merit particular attention.

"First, several cases of apoplectic death are preceded by paralytic affection of one side, more or less extensive, in the successive forms of distortion of one side of the face, loss of speech, loss of power in an arm, a leg, or the entire side. When these phenomena are followed by coma and death, necroscopic inspection shows, as in apoplexy, capillary injection, with or without extravasation, and generally more or less destruction of brain. The

commencement of the morbid process in this instance is doubtless the same capillary injection of part of the organ which, in a more exquisite degree, produces the comatose state. Secondly, though there are not a few instances in which an attack of loss of consciousness, sensation, and motion, is not followed by loss of voluntary motion, these, I have already attempted to show, depend on that capillary injection which is removeable by the use of remedies. When the capillary injection proceeds to destruction, either by hemorrhage, by softening, or by ulceration, (i. e. by superficial pulpy destruction of cerebral substance, consequent on hemorrhage,) it almost invariably leaves after it more or less of voluntary motion, generally on the side of the body opposite to that of the brain which has sustained the lesion. (K.) One of the most frequent effects of cerebral hemorrhage and its consequences, indeed, is palsy of the hemiplegic form; and in the brains of such persons as have laboured under this disease, either a broken-down and softened spot, or one or more hemorrhagic cavities or cysts, are found after death. (Wepfer, Willis, Morgagni, John Hunter, Baillie, Wilson, Abernethy, Rochoux, Serres, Lerminier, Tacheron, Abercrombie.) The general accuracy of these conclusions is confirmed not only by the necroscopic appearances of the brains of those who die of coma succeeding to palsy, but of those who die of the effects of injuries of the head, of abscess of the brain and cerebellum, and of tumors and other organic changes taking place either in the brain or in its membranes." (P. 421.)

The effects produced by capillary injection and hemorrhage in the spinal cord vary according to the stage of the process, and the region of the cord in which it occurs. "In the stage of injection it produces irregular involuntary twitches of the muscles of the trunk and extremities, numbness and coldness of the skin about the back, and occasionally of the limbs, and more or less loss of muscular power. In the advanced stage, whether that of hemorrhage or of pulpy destruction, numbness and palsy of the paraplegic form are complete." (P. 427.)

In some instances the state of capillary injection appears to give rise to tetanic symptoms. It is stated that in pulmonary consumption, whether depending on chronic bronchial inflammation, chronic pleurisy, or on tubercular disorganization, the brain is invariably found softer than natural.

"When the disease which induces death has continued long, this softness is very considerable, and amounts almost to semi-fluidity. It may then constitute a true cause of adventitious disease. This state of the brain, combined with a languid and retarded motion of the blood through the cerebral capillaries, may be the pathological cause of the delirium, which, either alone or

alternating with coma, not unfrequently precedes the death of phthisical patients." (P. 435.)

Confinement, with inactivity and low diet, tend to impair the firmness of the brain.

Induration of the brain is occasionally met with. The cause of this change, and the means by which it is affected, are not known. Various other morbid conditions of the brain are described by the author.

In the following chapters the anatomy and pathology of the following structures are considered: Muscle, sinew, white fibrous system, yellow fibrous system, bone, gristle, fibro-cartilage, skin, mucous, serous, and synovial membrane.

We have paid very deliberate attention to this volume, and have formed a very favorable opinion of its merit. He who is yet to learn will obtain from it much excellent elementary information, conveyed in a very perspicuous form; and he from whose memory may be gradually escaping knowledge once possessed, will find Dr. Craigie's work a convenient and valuable reference, in which extensive research is displayed without unnecessary pomp of learning.

We purposely deferred offering any comment upon the arrangement adopted by Dr. Craigie, until we had seen how it would maintain the general purposes of the proposed investigation. Although the arrangement of the diseased conditions of different structures according to their anatomical distinctions is much too artificial to be strictly correct, it is still sufficiently so, if the pathological inquirer bears in mind that disease is seldom confined to one structure alone. Inflammation, as it has been observed by Thomson; in his excellent "*Lectures on Inflammation*," in all the different textures and organs of the body, may, in one point of view, be regarded as forming one and the same specific disease, although modified by texture. The progress and duration of disease in general is also as much, or more, modified by its original cause, and the general constitution and diathesis of the person affected, than by the difference in the texture of the part in which it occurs.

Carmichael Smith, Pinel, and Bichat, have adopted the principle of pathological arrangement which is acted upon in the present work. Dr. Craigie observes, in his Preface, "that the advantages of this method have been recognized by John Hunter." We confess we thought Hunter was opposed to the doctrines of Carmichael Smith and others upon this subject: he states, "It has been supposed that

the different species or varieties of inflammation arise from the difference in the nature of the part inflamed; *but this is certainly not the case*, for, if it was, we should soon be made acquainted with all the different inflammations in the same person, at the same time, and even in the same wound. For instance, in an amputation of a leg, where we cut through the skin, cellular membrane, muscle, tendon, periosteum, bone, and marrow, the skin should give us the inflammation of its kind, the cellular membrane of its kind, the muscles of theirs, the periosteum, bone, marrow, &c. of theirs; but we find it is the same inflammation in them all."*

A Letter to the Right Hon. the Secretary of State for the Home Department, containing Remarks on the Report of the Select Committee of the House of Commons on Anatomy, and pointing out the Means by which the Science may be cultivated with advantage and safety to the Public. By G. J. GUTHRIE, F.R.S., Professor of Anatomy and Surgery to the Royal College of Surgeons; Surgeon to the Westminster Hospital, and to the Royal Westminster Ophthalmic Hospital, &c.—8vo. Sams, London, 1829.

It is unnecessary to enter into formal arguments upon points which excite no difference of opinion. The practice of dissection is admitted to be absolutely necessary: and it is equally admitted that the mode in which the anatomical schools have hitherto derived a supply of bodies, in this country, is highly disgraceful. We shudder when we reflect upon the recent proofs which have been afforded that it is also highly dangerous. It is surely time that our legislators should show, by their active and immediate interference, that they are neither totally indifferent to the cause of science, or deaf to the appeals of the public. We have always been convinced that the difficulties which surround this subject are more imaginary than real; and we are inclined to believe that it is not of very great importance what precise regulations the government may lay down to legalize the supply of subjects for dissection, provided they throw open some of the numerous sources from which bodies may be procured, under proper restrictions, and thus rescue the anatomist from the detestable necessity of holding communion with a horde of wretches, who are unworthy the title of men.

The plan suggested by Mr. GUTHRIE, in the very elo-

* Hunter on Inflammation, vol. i. p. 475, Travers's edition.

quent letter before us, might, we think, be improved in some of its details. He recommends the supply of dead bodies for public dissection to be derived from the following sources:

“ 1. All persons hanged, or otherwise executed, and for all offences whatsoever.

“ 2. All persons who die under sentence for criminal offences, whether in the hulks, gaol, penitentiary, or elsewhere.

“ 3. All persons who die in temporary or floating hospitals, in gaol, penitentiary, or other place of detention, or prison, from whatever cause they may have been placed there, and who have no friends to bury them.

“ 4. All persons found dead, from whatever causes, in highways, canals, or otherwise, and who, having no friends to bury them, are sent to bone-houses for interment, at the expense of the parish or county.

“ 5, and lastly. The poor who die in workhouses, having no friends to bury them, having expressed no wish on the subject, and having no respectable or decent relatives to express it for them, either before or after death.

“ It is not proposed to interfere by regulations with the bodies of those who die without friends in regularly established hospitals; it being presumed that the surgeons of those institutions will properly apply them in the instruction of the students committed to their charge. In other words, it is not intended that the public schools of anatomy shall interfere with the private or public instruction delivered by surgeons in their own hospitals.

“ The means of supply being furnished, the following regulations are proposed, to ensure a fair and regular distribution, which must be enforced, in one way or other, by legal enactment. It being understood that there are no laws on the subject to repeal, save that one, or part of one, which directs murderers to be hanged until dead, ‘ and their bodies to be given over for dissection,’ and for the reception of which bodies the College of Surgeons is bound by their charter to find a proper place; which is at present in the vicinity of Newgate.

“ *Laws proposed to be enacted.*—1. Punishing all persons actually engaged in exhumating or stealing a dead body, or of selling it without authority, and who can be proved to be so engaged after this session of Parliament. For the first offence, six months to hard labour, and to find two securities, in fifty pounds each, for future good behaviour; to be kept to hard labour until procured. For the second offence, double the punishment. Medical or other persons knowingly receiving such dead bodies, three months to the treadmill, and a fine of one hundred pounds; to be kept to hard labour until paid.

“ Rendering the practice of dissection, and the possessing of dead bodies, legal; and protecting the persons so employed, and

their property, by the same laws as protect persons and property generally.

" 3. Directing the five sources of supply of dead bodies, as at pages 30 and 31.

" 4. Declaring it to be illegal to require, or to take during life, in any hospital, workhouse, or other place for the reception of sick or poor people, securities in money or otherwise for the burial of such persons. Penalty, twenty pounds.

" 5. Declaring it legal, and directing all treasurers, governors, trustees, or others in authority, in hospitals or other places; and all vestries, church-wardens, overseers of the poor, and others in authority in the parishes, to give over for dissection to the College of Surgeons, or persons appointed by them, the bodies of all persons who have died under their care or charge, without the means of burying them, and who have no relatives, or persons previously known to have been friends, who are willing to do it; and all other bodies in their charge which come within the meaning of classes 4 and 5 of the means of supply indicated, pages 30 and 31.

" 6. Appointing the Royal College of Surgeons of London, by their secretary, or other person nominated by them, the proper authority or authorities to whose order the bodies are to be delivered.

" 7. The Royal College of Surgeons to report quarterly, to the Secretary of State for the Home Department, on every point connected with this subject.

" 8. The funeral service to be read over all bodies (unless forbidden by law,) before delivery for dissection.

" 9. Legalizing the sale of a dead body by the friends of the deceased, after it has been viewed in the usual manner by the parish or other authorities.

" 10. The Council of the Royal College of Surgeons, in making regulations for the proper distribution of the bodies placed at their disposal, to find a proper cemetery in various parish churchyards for the interment of remains after dissection; and the Council of the College to be authorized to make such charge for each body as may be considered proper; subject to the approval of the Secretary of State for the Home Department.

" 11. All minor regulations of arrangement and detail made by the Council of the Royal College of Surgeons, and approved by the Secretary of State for the Home Department, to be binding on the different persons concerned. Penalty, twenty pounds.

" 12. Every dispute which may occur, and every offence to which a penalty is attached, to be settled by information laid in the usual manner, before any three police magistrates of the division in which the offence has been committed; and whose decision shall be final.

" In order to enable all parties to act with precision and a due regard to decorum, the following minor arrangements are pro-

posed, under the authority of the Secretary of State, to be varied from time to time, by his sanction.

"The Council of the Royal College of Surgeons, having the collection and distribution of all dead bodies intended for dissection, directs,

"1. An establishment of men, four or eight in number, to be ready for service every evening in the winter season from six to ten o'clock, and to proceed as directed with a shell (in a manner similar to that at present adopted by undertakers,) to the spot where the body is to be found.

"2. An establishment of one or two plain hearses, with two horses, a driver, and an attendant, in black, (like an undertaker's party,) to be ready to go to greater distances.

"3. The secretary, or proper officer appointed by the College, gives an order for the delivery of the body, which will be the receipt to the person who delivers it.

"The servant of the College who receives the body, delivers it again, according to an order received to that effect from the secretary; and the anatomist or gentleman who receives the body from him gives an acknowledgment, signed by himself or his assistant.

"In order to enable the secretary of the College to act with the necessary precision, the keepers of gaols, hulks, and penitentiaries, or other prisons, and the masters or governors of workhouses, and temporary or floating hospitals, should be directed, under certain penalties, to inform the secretary, or officer appointed by the College, when a person dies who is, by the preceding laws, ordered to be given over for dissection; and it will be the duty of the secretary, or other officer of the College, to signify in return at what hour the body will be sent for. Printed forms of communication to be furnished by the College, and letters (all paid by the College) to be sent within twenty-four hours.

"Teachers of anatomy to transmit every Monday morning to the secretary, or proper officer of the College, a return of the number of students wishing to dissect, and of the probable number of bodies required during the week; at the same time, a return of the number received during the past week, and the sum due for them at the price fixed. Practitioners, not being teachers, wishing to have a body for dissection, to communicate in a similar manner, their request being submitted for the approval of the president or vice-presidents."

The anatomical professors would, we think, very naturally object to the enactment of a law which would place them so completely at the mercy of the College of Surgeons. As the Council of the College is at present constituted, no apprehension either of partiality or illiberality is to be feared. But who can look into futurity, and say that it shall always be guided by the same principles of integrity

and impartiality. Some anatomical teachers may not be admitted to a seat in the Council, while others might enjoy that honour. In case there should be a scarcity of subjects for dissection, it is more than probable that the claims of the latter would be preferred, and hence would immediately arise jarring and discontent. In many points of view we deem it objectionable that any one part of the profession should be invested with the distribution of bodies, for the use of those to whom they may be professionally opposed. We are not inclined to judge harshly of human nature, but we foresee the great probability of discord springing up amongst us, and of constant evasions of any laws that may be enacted, if it should be rendered necessary to apply to the Council of the College for every body that may be required for dissection.

The appeal that Mr. Guthrie makes to the Secretary of State in this letter, will doubtless meet with attention. To one part of the plan we have ventured to object. With some modifications, however, it appears to us capable of effecting the desired object of supplying the anatomical student with subjects for dissection, without wounding the feelings of the public. It must not be imagined that any plan can be devised which will not have to encounter temporary opposition. The clamor may be loud at first, but it need not be feared that it will last long.

COLLECTANEA.

*Floriferis ut apes in saltibus omnia libent,
Omnia nos, iidem, depascimur aurea dicta.*

PHYSIOLOGY.

1. *On Seeing in Water.*—THOSE animals whose eyes are organized for seeing in water, see but indifferently in air. Hence, in those cases where the habits of the animal require it to see in both media, it is provided with two sets of eyes, or with eyes accommodated for seeing in each element. Thus the *Gyrinus natator*, an insect which generally swims on the surface of the water, but half submerged, is provided on each side with two eyes, one pair situated on the crown of the head, for seeing in the air, and another pair under the head, for seeing in the water. It is also probable that the fish named *Cobitis anableps*, which has in each eye an upper and under cornea of different curvatures, and for each cornea a particular anterior surface of the lens, is capable of seeing in water with the one half of the eye, and in air with the other half. Thus SPENNER found in this fish, the semidiameter of the upper cornea = 1.0; the under = 1.2; the two curvatures of the upper part of the

lens = 0.5; and the two curvatures of the under part of it = 0.3 Paris lines. It cannot be denied that, in general, land animals can see under water, and aquatic animals in air: even man sees under water, although the contrary has been maintained. It is not, however, possible that the same eye is ever so organized as to see equally well in both elements. Land animals always see indifferently in water, and aquatic animals imperfectly in air. The one is long-sighted in water, and the other short-sighted in air. An animal in which the eye is adapted for seeing equally well in air and water, can have but imperfect vision in either. These conclusions are in conformity with what is known of the power of vision in those animals that live partly on the land and partly in the water. The seal (*Phoca*) is one of those animals that live in both elements; but the seal has but imperfect vision in the air. ROSENTHAL, in his Memoir on the Organs of the Senses in the Seal, says, "We have convinced ourselves by careful observation on living seals, of the species *Phoca grypus* of FABER, that the animal is always short-sighted in the air; for when we held before it fish and other bodies, as pieces of wood or stones, it did not distinguish them accurately, until they were brought so near that the organ of smell could be called into activity." SCORESBY remarks, "Whales are observed to discover one another, in clear water, when under the surface, at an amazing distance. When at the surface, however, they do not see far." (*Scoresby's Arctic Regions*, vol. i. p. 456.) FABER, in his very interesting work on the habits and manners of birds that inhabit high northern latitudes, (p. 298, § 55,) remarks that divers (*Colymbus*) do not see so well above water as grebes (*Podiceps*), but better under water, because it is there that they obtain their food.

It also appears that birds which see well in one element, do not see so well in the other. Faber proposes the question, "Is it the case that divers, when under water, draw their nictitating membrane over the eye, as they do when looking towards the sun, in order to prevent the contact of the water!" It would appear, from the observations of TREVIRANUS, from whose excellent work, entitled "*Beiträge zur Anatomie und Physiologie der Sinneswerkzeuge des Menschen und der Thiere*, von Dr. G. R. Treviranus; fol. Bremen, 1828," the observations on vision we are now detailing are principally extracted, that, by drawing the nictitating membrane over the eye, divers, and all other land animals which seek their food under water, are enabled not only to prevent the immediate action of the water on the eye, but also to discover their prey. But, as the light loses more of its power on passing through water than in passing through air, and is still more weakened in its progress through the nictitating membrane, it follows that, owing to this membrane, vision must be less distinct under water than in the air.

2. *How do some Animals see in the Dark?*—Is there any arrangement in the eye, and what is it, by which animals that see in the dark are enabled to make up for the want of external light? When we consider the metallic lustre of the tapetum, which in many animals occupies a great part of the choroid coat, or even its whole surface; further, its resemblance to a concave mirror, and its relation to the light that penetrates into the interior of the eye, we cannot help considering it as the means employed for this purpose, by its collecting the light, and illuminating, by its reflection, objects lying in the axis of the eye. PREVOST objects to this explanation, that there are many animals whose eyes have no tapetum, although they conduct themselves as if they saw in the dark. This is actually the case. The tapetum occurs in

carnivora, ruminantia, pachydermata, cetacea, owls, crocodiles, snakes, rays, and sharks: it is wanting in man, apes, glires, chiroptera, hedgehogs, and moles; in birds, with exception of owls; and in osseous fishes. But the gnawers or glires, bats, the hedgehog and mole, are animals that obtain their food more by night than during the day; and many of them conduct themselves in the deepest darkness as if they were directed by the sense of sight. But this objection may be obviated by remarking, that it is probably some other sense than that of vision which procures for many of these animals sensations of external objects in the dark. We have in favor of this opinion not only the experiments of SPALLANZANI on bats, from which it appears that, after these creatures were deprived of the use of their eyes, they conducted themselves as if they still possessed the power of vision, but also the examples of species of that family, in which the eyes are so imperfectly developed, or lie so much concealed behind the outer skin, that it is of little or no use to the animal. The genera that see in the dark have undoubtedly so irritable a retina that they can only see during a very feeble light; whereas, in those animals whose eyes are organized equally for daylight and nocturnal darkness, the retina possesses less irritability. Hence, although these are without a tapetum, it does not follow that this organic part does not afford a mean for seeing during a feeble light.

The tapetum is either spread over the whole choroid or only over the upper half of it. The first is the case with the cetacea, owls, and with those amphibia and fishes which are provided with this shining envelope; the second occurs in carnivorous and ruminating animals. It is more extended in the ruminating than in the carnivorous tribes. But it always extends so far as to encompass the posterior extremity of the internal ocular axis. All the rays of light from external objects which reach it are united on it, through the transparent part of the eye, and it again reflects back the whole united rays towards the lens. This latter unites them into a single cone, which has the ocular axis as its axis, and its point is directed outwards. The very convergent rays of this cone become more divergent by their passage from the lens into the aqueous fluid, and from this into air or water. Finally, the apex of this cone falls into the point of the most distinct vision; for in this point is situated the focus of all the rays that reach from the interior of the eye to the posterior surface of the lens. The cone is complete when the tapetum is spread over the whole of the choroid; but the upper half of it is wanting when it occupies only the upper hemisphere of this coat. The tapetum is confined to the upper half of the choroid in all animals whose residence and manner of life are of such a nature that the under half of the retina is immediately struck by bright daylight; and for this simple reason, because the animal must have been dazzled by the reflection of the bright light from the under half of the latter. It covers the whole posterior portion of the internal eye in the cetacea and owls, many amphibia, rays, and sharks, because these animals live constantly in the water, or in a feebly luminous medium, or have their place of residence in dark corners, or go in quest of food during the night.

The experiments and observations of Prevost and Esser show that the reflection of light from the tapetum is the cause of the luminousness of the eyes observed under certain circumstances in the twilight in cats, dogs, sheep, and in general in all animals having a tapetum. But whether or not a phosphoric light sometimes proceeds from the retina or choroid, has not as yet

Bulimia—Spinal Cord—Venous Inflammation. 267

been fully ascertained. There are many examples of a luminousness in the dark having been observed in the human eye, yet it wants the tapetum. Probably, as Treviranus remarks, such cases may be of a pathological nature.—*Edinburgh New Philos. Journal.*

PATHOLOGY.

Bulimia.—RUYSCH gives an instance of bulimia, which was connected with a dilatation of the pylorus, in consequence of which the food slipped through the stomach into the intestines before there was time for digestion to take place; and it is recorded by LIEUTAUD, that, upon opening the body of a patient who had died of a disorder in which a voracious appetite was a leading symptom, he discovered a preternatural termination of the ductus choledochus in the stomach. In this case, the bile effused into the stomach seems to have kept up a constant irritation, by which the ingesta were expelled before digestion took place.—WADD; *Quarterly Journal of Science.*

Destruction of a Portion of the Spinal Cord.—A man, whose case is related by Mr. COPELAND, had paraplegia, dysuria, obstinacy of the bowels, and a feeling of tightness across his belly, as if a broad band had been tightly bound round it. His health had been declining for more than a year, and the commencement of his complaints was ascribed to having violently sprained his back in lifting a heavy weight. After being confined to bed with perfect paraplegia for three months, he died of gangrene of the nates.

On dissection, no disease could be discovered in the vertebræ; the spinal cord was entirely wanting for more than two inches. The membranes, which there formed an empty bag, were unusually vascular, and much thickened.

On the other hand, OLLIVIER found four inches of the cord entirely wanting in a child, aged eight years, who died of extreme marasmus, with caries of the vertebræ, but without loss either of sensibility or motion of the limbs.

VELPEAU has described several cases in which, in connexion with caries of the vertebræ, the cord was completely destroyed for the space of several inches; the patient having died of gradual marasmus, without any appearance of paralysis.

In MAGENDIE's *Journal* a case is described, in which the cord had become quite liquid, through two-thirds of the dorsal region and one third of the cervical. The arms were paralytic without loss of sensibility, but the legs were not affected.

Ollivier has also observed in two cases a remarkable wasting or diminution of the size of the cord. The one was in an old man, without any particular symptoms; the other in an idiot, with permanent contraction and wasting of the limbs.—ABERCROMBIE *on the Brain.*

Inflammation of the Veins in general, and Inflammation of the Veins of the Uterus. By DR. DANCE.—The common causes, such as punctures, laceration of the veins, &c. which produce inflammation of the veins generally, excite an inflammation which is confined to the part, and is simple in its nature: but, when the inflammation extends, attacks the internal coat of the vein, and pus is secreted, the disease assumes a dangerous character.

The general symptoms of inflammation of the veins, Dr. Dance divides into three orders; 1st. Those which are local and unattended by fever; 2d, the general phenomena of inflammation, according to its extent and intensity; 3d, the phenomena indicating the mixture of pus with the blood, and the development of various diseases in consequence.

Dr. Dance says, that the inflammation always extends in the same direction that the blood takes in the circulation, and assigns as the cause the transportation of pus. He considers the internal coat of the veins as a mucous membrane, and, when considerably inflamed, that pus is secreted. The pus thus secreted, says Dr. Dance, unites with the blood, is carried into the circulation, and is the cause of many remarkable diseases in distant parts; such as abscesses in the brain, liver, spleen, articulations, and, above all, the lungs; which show themselves in one or more of these parts after inflammation of the veins has existed, and pus has entered the circulation. He says, we cannot attribute the development of such diseases to any other cause than a mixture of pus with the blood, although its presence may not be capable of being demonstrated; and he thinks that this opinion offers the greatest probabilities, if we consider, 1st, the rapidity with which such diseases as mentioned above show themselves; 2d, the peculiar phenomena which belong to them; 3d, the appearance of the diseases immediately after inflammation of the veins; and lastly, the resemblance which the symptoms have to those of typhus, &c. Besides, says he, experiments have been made on living animals, in which the veins have been injected with putrid matter, and the symptoms that followed were analogous to those which present themselves in some cases of inflammation of the veins.

Inflammation of the veins of the uterus takes place only after delivery; it often extends to the substance of this organ: hence inflammation of the uterus; it may, however, be secondary to the inflammation of the uterus. Inflammation of the veins of the uterus is frequently confined to one side of the organ only: this probably depends on the attachment of the placenta to the uterus. It sometimes takes place in a manner which seems to be epidemic; an observation that singularly corresponds with that made by ancient authors relative to cases of severe fevers of recently delivered women; and Dr. Dance thinks these fevers were nothing more than inflammation of the veins of the uterus, complicated by purulent absorption.

Suppurations within, or external to, the joints, have been more commonly found after inflammation of the veins of the uterus, than after inflammation of the veins in general.

Dr. Dance says it would be desirable to know the characteristic or pathognomic symptoms of inflammation of the veins of the uterus, that it may be distinguished from inflammation of the uterus itself: but he does not know them.

To these propositions Dr. Dance adds some observations upon the treatment of inflammation of the veins generally, and gives the preference to the antiphlogistic plan in the first stages of the disease. He terminates by asking if it would not be rational, 1st, to employ compression above the point where the vein is inflamed, and before pus is secreted, to prevent the pus entering into the circulation? 2d. To wash the wound carefully when a vein is inflamed, to prevent the contact of pus with the internal membrane of the vein? 3dly. To inject emollient liquids into the cavity of the uterus after

delivery? 4thly. In the third stage of the malady, when pus has mixed itself with the blood, and bleeding is no longer practicable, ought not antiseptics to be employed?—*Nouvelle Bibliothèque Médicale.*

PRACTICAL MEDICINE.

Chronic Ptyalism.—A case of this kind is related by SOUQUET, which was cured by the mastication of canella bark, and by swallowing the juice of it. For nine years and a half the patient had discharged from the mouth five pints of saliva daily. He had never had syphilis, nor had he taken mercurial medicines of any kind.

Sulphur employed as a Preventive of Measles.—In a family of four children, two took the flour of sulphur night and morning, and were entirely preserved from the contagious influence of the disease, although they continued to live in the same atmosphere, and were allowed to communicate freely with the other children who had the disease. Two of five adults, who lived in the same house, contracted measles: one had before had the disease. They had employed no precautionary means. In another family, one child had measles. Three other children were not separated from the patient: they took, night and morning, sulphur mixed in sugar, and escaped the disease. The dose of the sulphur should be from two to six or eight grains, according to the age.

In another case, an infant took the sulphur as soon as the disease had clearly manifested itself in his brother. In eight days, however, the measles appeared, but the malady ran so favorable a course that it was probable the preservative effects of the remedy had some influence. Four other children were treated in a similar manner: they were designedly exposed to the contagion, but entirely escaped.

It is not presumed that a confident opinion can be hazarded from so small a number of facts. They are sufficient, however, to engage the attention of the profession.—*Recueil de la Société Médicale de Tours.*

Effects of Acupuncture in a Case of Paralysis, which had existed for seven years.—A young woman, twenty-two years of age, fell, about seven years ago, from a height of about four feet from the ground, on her back. After the accident she suffered great pain in the lumbar region, which continued. Three weeks after the fall she was attacked with peripneumonia, from which she soon recovered; but about the same time the lower right extremity became paralytic, in which she had great pain, and also continual pain in the loins. Baths and frictions were tried to restore the use of the limb, but without effect: its muscular power daily diminished, and she could not walk without the support of two sticks. In this state she continued for seven years after the accident, when she came into hospital to be cured of prurigo.

During her stay in the hospital, she witnessed the good effects of acupuncture in several cases of paralysis, and therefore solicited M. TROUVÉ to try its effects in her case. He introduced four needles in the lumbar region, and

* The opinions of Mr. ARNOTT, as laid before the Medical and Chirurgical Society, in a very elaborate paper, are similar to those of Dr. DANCE; but the views of the former are much more extensively illustrated by cases.—EDITORS.

after the lapse of two hours withdrew them. The patient raised herself, and walked without support, which she had not been able to do for some years. The pain in the loins was greatly relieved, but the pain in the paralytic limb was more violent, and, as she expressed herself, "it seemed as if the disease had fixed itself entirely in the posterior part of the thigh." In the evening of the same day three more needles were introduced in the superior and back part of the thigh, in the tract of the sciatic nerve. They were withdrawn three hours after their introduction, and the pain of the thigh was completely removed. The pain in the leg, however, was more violent than before: two needles, therefore, were introduced into the calf of the leg. The pain immediately ceased, and the patient walked about without support. She still complained of pain in the foot: two needles were introduced, which removed it entirely, and the patient was considered as well.—*Archives Générales.*

On the Employment of the Acetate of Ammonia in Uterine Diseases. By M. PATIN, D.M.P.—In the twelfth volume of the *Archives Générales*, page 651, M. CLOQUET related a case of difficult menstruation, which was completely cured by the acetate of ammonia. This case attracted the notice of M. PATIN, and led him to try this remedy in other cases of uterine disease. M. P. has related five interesting cases; and if experience should prove the truth of his observations in the employment of the acetate of ammonia in these diseases, the medical world will be much indebted to him. We shall give an outline of these cases, and shall state every thing that has direct relation to the subject.

CASE I.—A married woman, aged thirty-four, whose health had been partly deranged in consequence of frequent returns of menorrhagia, and who had cancer of the neck of the uterus, as well as symptoms of phthisis, applied to M. Patin for relief of the dreadful sufferings which she experienced at the approach of the period of menstruation. The cancer of the uterus had existed two years before he saw her: lancinating pains, deep ulcerations, fetid discharge filled with flakes of matter and clots of black blood, and the neck of the uterus descending almost as low as the orifice of the vagina, were the symptoms that characterized this dreadful disease. All these symptoms increased considerably five or six days before the period of menstruation, which were relieved only by an abundant flow of the menses, which produced great exhaustion.

M. Patin administered forty drops of the acetate of ammonia, three days before the expected period of menstruation: it diminished the pains greatly. The menses appeared on the sixth day after the use of the medicine: they were abundant, but not so considerable in quantity as before.

Whenever the violent pains were felt, or when there was any appearance of hemorrhage, the patient took thirty or forty drops of this medicine, during the interval of menstruation, in a glass of water, which arrested the pains, and diminished the hemorrhage.

The next time menstruation took place, it was not attended with so much pain; the quantity of the discharge was not so great as before; and it continued about the same time as when in health. The neck of the uterus, by examination, was found to be less in size and much shorter; the ulcerations had a better appearance, and seemed disposed to heal; the discharge was not so fetid, and it did not contain so many flakes of matter. The patient could

sit and walk without pain, which she had not been able to do for a very long time before.

M. Patin concludes this case by saying that he should not have been without hopes that a cure of the cancerous disease might have been effected, if the patient had not laboured under phthisis. She left Troyes as soon as she was able to travel, and he was therefore deprived of the opportunity of stating the result of her case.

CASE II.—A girl, nineteen years of age, during four or five days which preceded menstruation, suffered pain and a sense of weight in the pelvis, pain of the head, nausea, frequent vomiting, restlessness, &c. These symptoms continued till the flow of the catamenia, which lasted about three days, and in quantity was rather small. The acetate of ammonia, given in the dose of thirty drops twice in the twenty-four days, the second day of the coming on of the above symptoms, freed the patient almost immediately of all her sufferings. The symptoms returned the third or fourth day, and another dose removed them entirely.

She has continued this treatment for three months, and menstruation is no longer painful to her; but the discharge, whilst she was taking the medicine, diminished in quantity, and continued for a day and a half only. It was therefore thought advisable to leave off the acetate of ammonia; which she did, and in a short time the discharge was as abundant as before, and continued to flow its usual length of time, without being attended by pain.

CASE III.—A young woman, twenty-five years of age, who menstruated regularly, but suffered previous to the time and during the period of the discharge. Besides the local symptoms, she had a dry cough and great oppression at the chest. She took the acetate of ammonia as in the preceding case, and the result was the same: the prompt removal of the pains and a temporary diminution of the discharge.

CASE IV.—A lady, aged thirty-two, of a nervous temperament, who menstruated at the age of twelve, and who had enjoyed good health, and whose periodical discharge had been very regular until domestic troubles had deranged her general health, consulted M. Patin respecting her irregularity of menstruation. She had borne three children in the space of four years; had suffered much from menorrhagia after marriage; and during the last confinement had an attack of peritonitis, which had nearly destroyed her. After recovering from these attacks, and enjoying twelve months' comparative good health, other domestic troubles arose, which had the effect of bringing on menstruation twice a month: the quantity of the discharge at each time was considerable, and it continued to flow for many days, leaving scarcely more than four or five days' interval between the termination of one period to the commencement of the other. This state was attended by a cough, oppression of the chest, loss of appetite, nausea, and loss of strength.

This was her state when she consulted M. Patin. He prescribed for her the acetate of ammonia in the dose of fifteen, increased to twenty-five drops morning and evening. The menses gradually diminished in quantity, and at the end of three months continued to flow for four days only. The other symptoms also disappeared, except the cough, which continued, but in a much less degree. Six months after this treatment menstruation took place regularly, and the general health was in a great degree restored.

CASE V.—A woman, aged thirty-seven, of very irregular habits, menstruated at ten years of age, and married at twelve. Her catamenia had been

regular, very abundant, and continued to flow for ten or twelve days. After marriage, leucorrhœa came on. She miscarried six successive times; yet notwithstanding so many causes of debility, she had remarkably good health until she was thirty-seven years of age.

In August and September, 1827, menorrhagia came on; a copious discharge of the menses continuing for seventeen days, attended with a dry cough and oppression at the chest. In October she did not menstruate; but, from November until the February following, she had almost constant discharges, which were sometimes considerable in quantity; and, during these discharges, a dry cough and oppression at the chest, loss of appetite, nausea, frequent vomitings, and intense heat of the genitals, which extended over the lower part of the abdomen, were the accompanying symptoms. In the month of February, the discharge did not make its appearance for twenty days. During March and April, it was so great as to wet through eight or ten cloths doubled in the course of the day.

In May 1828, when she consulted M. Patin for the first time, her state was most deplorable: she was extremely thin, her countenance of a yellowish hue, her eyes dull, her skin hot and dry, her pulse frequent and small, a dry and troublesome cough, oppression at the chest; a considerable discharge of sanguineous fluid from the uterus, with clots of blood; a burning heat in the pelvis, great pain in the right lumbar region, particularly during the emission of urine; loss of appetite, obstinate costiveness, pain in the region of the stomach, nausea and frequent vomitings of mucous matter; great thirst; lower part of the abdomen tense and painful. The neck of the uterus cold, lax, much enlarged, and very sensible to the slightest touch, the least pressure occasioning a discharge of blood from it.

A blister to the arm, astringent lotions to the lower part of the abdomen, and other means, were used for five days, without effect. By taking forty drops of the acetate of ammonia three times a day, keeping in the horizontal position, and remaining perfectly quiet, the chief symptoms were removed in four days, a slight discharge from the uterus only remaining: for this she was directed to use an injection of port wine and infusion of roses, which arrested the discharge in a short time.

It is remarkable that, before she took the acetate of ammonia, whilst she was suffering in the manner above described, her violent desire for coition was not in the least abated; but the acetate of ammonia seemed to have the effect of counteracting this morbid passion, and, as she expressed herself, of "freezing and depriving her of a pleasure which was more dear to her than life."

She had recovered her usual strength, and was almost perfectly restored to health, when, on the 1st and 2d of June, she imprudently walked a great distance, which brought on menorrhagia again, and all the symptoms above described. She used the astringent lotion for three days, without consulting any medical person, but it only increased the symptoms. On the 4th of June she again consulted M. Patin, who prescribed sixty, and afterwards seventy, drops of the acetate of ammonia four times a day. The effect of the remedy was instantaneous, as in the evening of the same day she was very much better, and at the end of forty-eight hours had no other symptom than a slight sanguineous discharge, which was soon arrested by the vinous injection. From the 6th of June to the 6th of July, the patient has had none of the above symptoms, and seems to be perfectly recovered.

M. Patin concludes by saying that these cases, and others, have proved to him that the acetate of ammonia is applicable,

1st. In cases of painful menstruation; although with some reserve, as it diminishes the quantity of the discharge.

2d. In cases of menorrhagia, in which he has obtained the most decided benefit from the use of it.

3d. In cases of cancer of the uterus, in which it acts at least as a powerful palliative.

4th. In cases of nymphomania; though he acknowledges that he has but one single fact (as given in Case V.) to support this conclusion.

M. Patin considers the acetate of ammonia to have a special action on the uterus, and this action to be decidedly sedative; therefore, says he, reasoning by analogy, it may be of use in cases of threatened abortion, in inflammations of the uterus and ovaries, &c. The largest dose of this medicine that M. Patin has given in uterine diseases has been seventy drops: this dose, he says, produces stupor and a species of intoxication, which lasts some minutes; though in other diseases he has given as much as five ounces in the space of twenty-four hours.

SURGERY.

Aneurism of the Carotid Artery cured by VALSALVA's Plan.—The aneurismal swelling was seated on the left side of the neck, and extended from the thyroid gland to the clavicle. It was larger than a hen's egg, and pulsated very strongly. The integuments covering it were of a natural colour. It was entirely cured by a long continuance of the strictest regimen, consisting of weak broths, bread, vegetables, acid drinks, bodily tranquillity, repeated bleeding, the exhibition of digitalis and of laurel-water. Ice was also frequently applied to the tumor. Compression could not be borne. The patient occasionally suffered from attacks of difficult deglutition.

At the time this case was recorded, four years had elapsed, and he remained perfectly well.—*Hufeland's Journal.*

Ligature of the external Iliac Artery.—M. RICHERAND lately presented to the Royal Academy of Medicine a patient, upon whom he had performed the operation for aneurism. No untoward symptom followed. On the day after the ligature was applied, no numbness was felt in the limb, and the man was anxious to rise from his bed. The ligature came away on the twenty-fifth day after the operation, and on the fortieth the wound was completely cicatrized. M. R. conceives that the favorable progress of the case depended on the particular manner in which the operation was performed. The peculiarity, upon which much stress appears to be laid, was that, after having detached the peritoneum, especial care was taken not to separate the vessel to a greater extent than was absolutely necessary for the application of the ligature. This precaution is doubtless of much consequence, but we apprehend that English surgeons never neglect to adopt it in all cases of aneurism.

Fungus Hæmatodes cured by Alum and the Red Oxyd of Mercury.—Madame Brick, twenty-six years of age, had suffered in infancy from severe scrofulous affections. She had had ulcers in the neck and other parts of the body. Her

health had latterly been good. In 1820 she consulted Dr. SCHUTTE respecting a small tumor on her left cheek, immediately above the ear. It was about the size of a nut, and resembled an encysted tumor. Although it was moveable, it appeared to adhere partially to the skin. Several small dilated vessels were observed on the skin which covered it. On the summit of the tumor were several warty excrescences. The tumor had been caused by a blow which had been inflicted some weeks before, and had not been interfered with from a hope that it would spontaneously disperse.

Dr. S. did not again see the patient until January 1823. The tumor was now the size of the fist. It was still moveable at the base, but the skin which covered it was of a bluish tint. The vessels which ramified over it were not increased in size or number. The tumor was elastic, and not hard. It appeared as if it contained pus.

In April, the patient observing a point in which a fluctuation was perceptible, opened it with a pin, for the purpose of discharging the supposed matter. Violent hemorrhage succeeded, which could only be arrested by the application of a very tight bandage. Two days after, a still more formidable bleeding took place, which threatened to destroy her. She lost more than two pints of blood; and the small opening which had been made had enlarged to the size of a sixpence. The immediate danger was obviated by the application of lint, rosin, gum arabic, and a bandage. A strengthening regimen soon restored her health.

The dressings were removed five days afterwards. The wound had still enlarged. Hemorrhage again took place, and was arrested by the same means.

In three days the dressings were renewed. The wound was now two inches and a half in diameter. The hemorrhage was more violent than ever. Calcined alum was now applied, very finely powdered.

Upon the next examination, two days afterwards, there was a very slight discharge of blood, which appeared to flow from many small openings over the whole surface of the wound. The interior of the wound resembled a fine moistened sponge. It was of a bluish white colour, in some parts rather red.

No alteration took place for three days. A sixth part of the red oxyd of mercury was now added to the alum. The wound was dressed every day, and each time the quantity of the oxyd of mercury was increased.

Under this treatment, the morbid substance gradually diminished. When the upper half of the fungus had disappeared, a compact substance was seen at the bottom of the wound, which resembled, both in colour and consistence, the medullary substance of the brain. A small quantity of blood was still discharged from the substance, but in a much less quantity than from the fungoid substance. This encephaloid matter was also removed by equal parts of alum and red precipitate, and the cure was completed in April 1824.

Quinine and other bitters were given internally throughout the treatment of the case.—*Graëfe's Journal*.

Remedy for Sore Nipples.—We have frequently found the following simple remedy very efficacious: it is to be applied after suckling.

R. Pulv. Acaciæ ʒss.; Aluminis gr. v. M. diligentissime ut fiat pulvis, cujus inspergatur paxillum super mamillas pro re natâ.

We do not remember to whom we are indebted for this prescription.

Gleet cured by an Injection of Sea Water.—An obstinate case of gleet is recorded in the eleventh volume of the Edinburgh Medical Journal, by Mr. FLETCHER, which was cured by an injection of sea water. The patient had laboured under the complaint for two years. It was removed in ten days.

MIDWIFERY.

A Case of Extra-uterine Abdominal Pregnancy. By Dr. MITIVIE.—This is a very interesting and curious case, not only because it presents a considerable degree of ossification, of development, and conformation of the cranium of a fœtus, but because it existed in the cavity of the peritoneum of a woman seventy-seven years of age; to whom it appears not to have occasioned the least inconvenience.

A woman, who had had several children, died, aged seventy-seven, in l'Hospice de la Salpêtrière. The post-mortem examination presented an irregular body in the cavity of the abdomen, floating, and attached only by cellular tissue to the mesentery and a portion of the small intestines. The peritoneum, uterus, and its appendages, and in short all the viscera, appeared to be healthy.

The tumor was easily removed from the abdomen, and was found to be a fœtal skeleton enveloped by a thin membrane, which was nearly diaphanous. The length of the tumor was two inches; it was divided into two unequal portions by a kind of neck; the largest portion contained the cranium, and the smallest portion the trunk, of the fœtus. On examining the skeleton, the cranium was found to be ossified, and not very ill formed; its size was, in the anterior posterior diameter, one inch eight lines and a half; transversely, one inch four lines; vertically, one inch. All the different bones of the cranium could be easily distinguished: the fontanels had disappeared; all the sutures were united. The orbits were formed, and the superciliary ridges perfect; but the base of the os occipitale was not perfectly ossified, and there were no ossa maxillaria. The cranium was united to the trunk by fibro-cartilaginous bands, and probably by articulating surfaces, which could not be ascertained, as it was desirable to preserve the little skeleton as entire as possible.

The trunk was bent a little forward, and surrounded by a sort of layer of cellular tissue: it presented the rudiments of the vertebral column, sternum, and ribs. There were no lower extremities, but on the sides of the thorax there were fragments of the bones of the arms.

On dividing the skeleton perpendicularly through the median line, the cranium appeared well formed: its walls were about half a line in thickness; they were lined by the dura mater. A yellow gelatinous fluid, without any distinct organization, but surrounded by a thin membrane, filled its cavity.

The cervical vertebræ were made up of several pieces, which being irregularly disposed, each vertebra could not be easily distinguished. The dorsal vertebræ consisted of osseous rings, and were more easily traced. The lumbar vertebræ consisted also of rings of osseous matter, and were easily distinguished; as was also the sacrum.

The thorax and abdomen appeared to form but one cavity. The thorax was empty superiorly, where the pleura was distinctly seen upon the ribs; inferiorly, it contained a mass of grayish yellow matter, resembling fat. This

mass presented various folds, and was without doubt the remains of the viscera. In the centre of this mass there was a kind of brownish kernel, extending the whole length of the vertebral column, provided with a small cavity. This was probably the heart and the aorta: but it was difficult to ascertain this point.

Blood-vessels were seen about the head and thorax of the fœtus, and without doubt these vessels were furnished through the means of the cellular membrane which connected the tumor to the mesentery and small intestines; although, on close examination, the cellular membrane itself presented no vessels.—*Archives Générales*.

MISCELLANEOUS.

Communication of Disease by Leeches.—It is important to bear in mind that leeches, which had been applied first to a syphilitic patient, and afterwards to an infant, communicated the disease to the latter.—*Westphaelischer Anzeiger*.

Preservation of Leeches.—A new vessel of deal, large enough to contain sufficient water for five hundred leeches, is to be furnished with a stopcock, to draw off the water. It is to be half filled with the mud from the lake or pond whence the leeches have been taken, and two or three roots of the Florence iris (*Calamus Aromaticus*) are to be set in the mud. The leeches like this plant. The usual precautions as to temperature, frequent change of water, &c. are to be taken. The water is to be changed slowly, and the fresh water added by means of a funnel descending to the bottom of the vessel. This method has been found preferable to all others tried at the hospital of Bamberg.—*Bull. Univ.*

Account of an Idiot of an Herbivorous Habit. By Dr. FRANÇOIS.—A girl, named Roger, twenty years old, is a perfect idiot. Her physical development was tardy, although at present she is very strong: she was three years old before she could walk. She has never spoken; her wants and her desires are expressed by cries which much resemble grunting; she is not deaf, obeys when she is ordered, and appears to be of a peaceable disposition. When she is contradicted, she expresses her anger by scratching the root of her nose. When seated or lying down, her head and hands are in constant motion, and apparently without any design. She tears every thing that falls into her hands. She is of the middle size, and thick set; her skin is white, eyes blue; her forehead prominent and protruding; her mouth wide, and her lips very thick; her countenance is healthy, but her face is without expression. Her step is uncertain, and resembles that of a person scarcely awake.

This unfortunate girl moves about voluntarily on her hands and knees; and in this position searches about, smells at every thing, and puts what she finds into her mouth. She seems to prefer finding her food, rather than that it should be given to her. She satisfies the wants of nature wherever she may chance to be, without shame or scruple. The food she prefers is trefoil, clover, and groundsel; next to these things, raw meat and the entrails of animals. She dislikes every thing that is cooked, and eats bread only for

want of something better. She tears up grass, which she makes into a kind of bundle, and places it between the molars on one side of the mouth; then, without using the other teeth, she grinds it by moving her jaws horizontally. She likes wine very much, but does not drink it in the common way: being accustomed, without doubt, to quench her thirst in rivulets, she therefore laps and sucks up all liquids. She cannot distinguish the sexes. Abandoned by her parents, she has imbibed the practices and allurements of the animals with which she has lived. Her father declares that she knows her way sufficiently to return home even at half a league distance. She was three years old when she first showed a taste for raw meat. The entrails of a rabbit having been thrown into a courtyard, the girl seized them, and disputed the possession of them with a dog. Passing almost all her time in the fields among beasts, example and hunger have taught her to feed upon grass.

This girl is to be placed in the Salpêtrière,—*Journal Générale*.

Innocuous Nature of Putrid Exhalations.—A committee has been engaged in France in examining the circumstances relative to the knacker's operations. His business consists in killing old worn-out horses, and turning every part of their body to account. The most singular results which the committee have obtained relate to the innocuous nature of the exhalations arising from the putrefying matter. Every body examined agreed that they were offensive and disgusting, but none that they were unwholesome: on the contrary, they appeared to conduce to health. All the men, women, and children concerned in the works of this kind had unvarying health, and were remarkably well in appearance and strong in body. The workmen commonly attained an old age, and were generally free from the usual infirmities which accompany it. Sixty, seventy, and even eighty, were common ages. Persons who live close to the places, or go there daily, share these advantages with the workmen. During the time that an epidemic fever was in full force at two neighbouring places, not one of the workmen in the establishment at Mountfaucou was affected by it. It did not appear that it was only the men who were habituated to the works that were thus favored; for when, from press of business, new workmen were taken on, they did not suffer in health from the exhalations.

In confirmation of the above observations, similar cases are quoted. Above two hundred exhumations are made yearly at Paris, about three or four months after death: not a single case of injury to the workmen has been known.

M. LABARRAQUE has observed that the catgut makers, who live in a continually putrid atmosphere, arising from macerating intestines, enjoy remarkable health.

Similar circumstances were remarked at the exhumations of the Cimetière des Innocens.

Whatever disease the horse may have died of, or been killed for, the workmen have no fear, adopt no precautions, and run no risk. Sometimes, when strangers are present, they pretend to be careful; but, in private, really laugh at such notions. They handle diseased as well as healthy parts, always with impunity. They frequently cut themselves, but the wounds heal with the greatest facility; and their best remedy is to put a slice of the flesh about the wound.

On making inquiry of those to whom the horse skins were sent, and who, besides having to handle them when very putrescent, were more exposed to effects from diseases in the skin, they learnt that these men also, from experience, had no fear, and never suffered injury. Horse-skins never occasioned injury to those who worked them; but in this they differed from the skins of oxen, cows, and especially sheep, which sometimes did occasion injury though not so often as is usually supposed.—*Recueil Industriel*.

INTELLIGENCE.

MONTHLY REPORT OF PREVALENT DISEASES.

DURING the course of the last month, scarlet fever has been very prevalent. In most cases the diseases has been more than usually severe, and in a few instances children have fallen victims to it, the symptoms from the commencement having indicated danger. In these cases the disease ran a very rapid course, destroying the patient in four or five days from the attack. Its chief characteristics were, from the beginning, fever of a very low type, a small and indistinct pulse, disposition to coma, extensive ulcerations in the throat, with dark sloughs. As commonly happens where the throat is thus severely affected, the eruption upon the skin was slight; the cutaneous efflorescence being more apparent in the milder cases. In one instance, the patient, an adult female, laboured under the above symptoms, together with slight delirium. Dr. MACLEOD prescribed for her saline draughts with an excess of ammonia, and she evidently derived much benefit from the remedy. Her skin became of a more regular temperature; slight perspirations took place; the delirium ceased; and in a few days she was convalescent.

J. HOULTON, Esq. F.L.S., at a recent meeting of the Medico-Botanical Society, exhibited a specimen of the extract of the *Cheonopodium olidum*. Mr. H. has in two cases found this remedy to possess the most decided emmenagogue powers. By former writers on materia medica the same virtue has been ascribed to this plant, although it has lately been much, or perhaps entirely, neglected. When we consider the very scanty list of emmenagogue remedies we have, the propriety of not losing sight of the suggestion of Mr. Houlton must be evident.

Royal College of Physicians.—The first evening meeting took place at the College of Physicians on Monday evening, February 9th. The company was not numerous, and consisted principally of visitors. Two papers were read: the first, by the late Dr. BAILLIE, on the subject of Paraplegia. It contained a brief recital of many cases of that form of palsy, and its principal object was to show that paraplegia was more frequently dependent upon disease of the head than of the spine. The second communication, by Dr. GREGORY, stated the result of his experience at the Small-Pox Hospital during the year 1828. It is decidedly favorable to the cause of vaccination.

Société Royale de Bordeaux.—A prize of three hundred francs has been offered by this Society for the best Treatise upon the following subject: "To describe Puerperal Peritonitis, and to determine, by clinical facts, the particular cases in which the various modes of treatment that have been recommended are to be applied." Papers to be written either in Latin or French, and addressed (before the 15th June, 1829, free of expense,) to M. Dupuch Lapointe, secretary of the Society, Rue de la Grande Taupe, No. 21, Bordeaux.

Surgical Lectures at St. Bartholomew's.—In consequence of the severe indisposition of Mr. ABERNETHY, Mr. LAWRENCE has been appointed to give the surgical course at St. Bartholomew's Hospital.

Royal Universal Infirmary for Children.—Mr. DOUBLEDAY has been elected surgeon to this institution.

CÆSAR HAWKINS, Esq. has been elected surgeon of St. George's Hospital; a vacancy having occurred in consequence of the lamented death of Mr. ROSE.

Mr. LISTON, of Edinburgh, has lately published a letter, denying that he is the author of the "Lectures on Aneurism" which were some time ago published in the *Lancet*, and attributed to him!

Physiology.—Mr. BROUGHTON, surgeon to the 2d Life Guards, and one of the surgeons of the St. George's and St. James's Dispensary, has recommenced his Physiological Lectures to the dispensary pupils and others, who have gratuitous admission to them, on application at the house of the charity, in King street, Golden square, every Tuesday and Thursday evening, from eight to nine o'clock. These lectures have been well attended, and we have had very favorable accounts of them from those who are very capable of judging of their merit.

False Affidavits made at Apothecaries' Hall by Candidates.—It has been rumoured, but we hope without foundation, that it is common for false certificates to be presented to the Apothecaries' Company by gentlemen who present themselves for examination. For the honour of the profession, we trust such an occurrence is at least rare. If it is presumed that such certificates are carelessly investigated, it is a great mistake.

We have no wish to add to the punishment which has been already inflicted, by making the names of certain parties still more notorious than they already are; but it may be proper to mention, that in one case a true bill has been found for a misdemeanour, in consequence of the candidate having made a false affidavit of his age; and in another instance six months' imprisonment has been awarded, for having presented false indentures of apprenticeship.

LITERARY NOTICES.

Pharmacopœia.—We understand that a committee has been appointed by the College of Physicians, to prepare a new edition of the *Pharmacopœia*.—The general utility of the work would be much increased, if the French and German names of drugs were given.

Dr. GRANVILLE's *Work*, "*On Abortion, and the Diseases of Menstruation*."—For many years Dr. G. has been collecting materials and arranging the results of his extensive experience upon these subjects, and we are happy to find that his work is now in a forward state of preparation. We have been favored with a view of some of the illustrative plates and drawings, which have been executed by PERRY in a very masterly and correct manner.

Upon the subject of abortion we have as yet only very imperfect essays. We have every reason to believe, from the numerous records of cases we have seen in the possession of Dr. G., that his work will be rich in practical facts, and that it will completely fill up the blank in the English catalogue of medical works which we have hitherto had to lament.

We are glad to find that a third edition of MASON GOOD's "*Study of Medicine*," containing all the author's final corrections and improvements, together with additional modern information on physiology, practice, pathology, and the nature of diseases in general, is now preparing for publication by Mr. SAMUEL COOPER, author of the *Dictionary of Practical Surgery*, &c. From the extraordinary diligence and great judgment Mr. Cooper has shown in his previous publications, we have reason to congratulate the profession upon his having undertaken this task.

Mr. DUFFIN "*On the Influence of Physical Education in producing and confirming, in Females, Deformity of the Spine*."—Although this volume is intended rather for popular than professional reference, it will be found to contain many hints that are not unworthy the attention of the medical practitioner. The author has not been so desirous of giving an air of novelty to his performance, as of collecting, and illustrating from his own experience, various facts which are scattered through many volumes, in proof of the serious injury inflicted upon young females by the common errors of modern education. The most likely modes of preventing the serious evils which too frequently result from an injudicious system of school discipline are pointed out, and many judicious observations are offered upon the various kinds of corporeal exercise which should be employed by young females for the preservation of their health, as well as for their recreation.

MAYO's "*Outlines of Human Physiology*."—A second edition of this valuable work has recently been published. Every part of it has been revised, and to many chapters much additional information is added. The important subject of the functions of the nerves, which has been so materially elucidated by the physiological experiments of Mr. Mayo, is treated at much greater length than in the former edition. It is frequently difficult, if not impossible, to convey to the mind of the student, by verbal description, a

clear conception of the structure of parts: Mr. Mayo has therefore very judiciously added to the present edition many illustrative sketches, which the pupil in physiology will find of great assistance to him. We know no book in which the elements of physiology are more perspicuously and usefully described.

"The Pupil's Introduction to Botany; by JOHN STEGGALL, M.D."—The recent regulations of the College of Surgeons, and the Company of Apothecaries, demand from the student a certain extent of botanical knowledge. In this little volume he will find, in a very cheap form, every requisite elementary information upon the subject. The general reader, also, who is about to enter upon botanical studies, cannot select a more effectual assistant to clear his path, than this brief but instructive book. A list of plants in the London, Edinburgh, and Dublin Pharmacopœias, is given; and a very copious glossary of botanical terms is also appended to the volume. The plates will be found of much assistance to the pupil in botany.

MONTHLY LIST OF MEDICAL BOOKS.

[Medical Works cannot be entered on this List except a copy be sent for the purpose; the titles of Books having frequently been transmitted to us, as published, which have not appeared for weeks, or even months, after.]

A New System of Treating the Human Teeth; explaining the Causes which lead to their Decay, and the most approved Methods of preserving them. To which is added, some Account of a Discovery made by the Author for the Cure of Toothach and Tic Douloureux, &c. By J. P. CLARK, A.M. Dentist. —8vo. pp. 163. Longman, London.

The Influence of Physical Education in producing and confirming in Females Deformity of the Spine. By E. W. DUFFIN, Surgeon.—8vo. pp. 135. London, 1829.

A Manual for the Use of Students preparing for Examination at Apothecaries' Hall. By JOHN STEGGALL, M.D.—12mo. pp. 260. Anderson, 1829.

The Anatomy and Physiology of the Nervous System. By VALENTINE FLOOD, A.M. M.B. &c. Vol. I.—Dublin, 1828.

A General, Medical, and Statistical History of the present Condition of Public Charity in France; comprising a detailed Account of all Establishments for the Sick, the Aged, and the Infirmary; for Children and for Lunatics, &c. By DAVID JOHNSTON, M.D. &c.—8vo. pp. 605. Edinburgh; and Simpkin and Marshall, London.

Selections from Physicians' Prescriptions; containing, 1, a copious List of Forms, Phrases, and Abbreviations used in Prescriptions, with Notes; 2, a Series of Prescriptions, illustrating the use of these Forms; 3, the Grammatical Construction of Prescriptions. For the use of Medical Students. By J. PEREIRA, F.L.S. &c. Fourth Edition, enlarged.—Highley, London, 1829.

An Essay on Mineral, Vegetable, Animal, and Aerial Poisons; classified according to Orfila; including the general Symptoms, Treatment, Tests, Morbid Appearances, &c. with the Means of restoring Suspended Animation. To which is appended, a Description of the Stomach-Pump. By JOHN STEGGALL, M.D.—18mo. Churchill, London, 1829.

A Treatise on the Diseases of the Chest, and on Mediate Auscultation. By R. T. H. LAENNEC, M.D. &c. From the French, with Notes and a Sketch of the Author's Life. By JOHN FORBES, M.D. &c. Plates. Third Edition, with additional Notes.—8vo. pp. 736. Underwood, 1829.

The American Journal of the Medical Sciences, November 1828.—Philadelphia.

Traité de l'Acupuncture, ou Zin-King des Chinois et des Japonais. Par J. M. CHURCHILL, Surgeon. Traduit de l'Anglais, par M. R. CHARBONNIER, M.D.—Paris.

To the interesting essay of the author, the translator has merely added a few brief notes.

Medical Botany. By J. STEPHENSON, M.D. &c. and J. M. CHURCHILL, F.L.S. &c. No. 25, for January 1829, containing Plates of the Rosa Canina, Crocus Sativus, Myroxylon Perniferum, and Polygala Senega.—No. 26, for February, with Plates of the Myristica Moschata, Solidago Virgaurea, and Matonia Cardamomum.

Although the reputation of this work is now well established, the endeavours of the Editors to render it attractive have not diminished. The plates are elegantly executed; the descriptions of them are scientifically correct, and practically useful.

METEOROLOGICAL JOURNAL,

By Messrs. HARRIS and Co. Mathematical Instrument Makers, 50, High Holborn.

January	Rain gauge.	Moon.	Thermom.			Barometer.		De Luc's Hygrom.		Winds.		Atmospheric Variations.		
			9 A.M.	MAX.	MID.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 A.M.	2 P.M.	10 P.M.
20		○	28	32	27	29.94	29.86	65	65	NNE	NNE	Fog	Foggy	Fine
21			29	32	22	.81	.76	63	63	NE	ENE	F. & S.	Snow	Cloudy
22			25	30	25	.57	.54	63	60	E	E	Fine	Fine	Fine
23			23	22	19	.44	.41	60	63	E	ENE	Fine	Fine	Fine
24			20	27	20	.43	.52	63	64	N	NW	Fine	Snow	Seow
25			20	23	21	.50	.38	65	65	NNE	NNE	Fine	Fine	Cloudy
26			32	42	36	28.97	.02	70	70	SE	SSW	Foggy	Fine	Fine
27			28	41	35	29.01	.04	70	69	SSW	SSW	Cloudy	Rain	Fine
28	.08	☾	38	41	35	.27	.49	69	67	W	W	Foggy	Fine	Cloudy
29			36	40	33	.43	.37	68	70	WNW	E	Fog	Fine	Fine
30			35	40	34	.42	.47	69	69	NE	NW	Fine	Fine	—
31			37	39	33	30.01	30.20	67	64	N	NE	Fine	—	—
Feb. 1			33	39	25	.28	.40	60	60	NE	SE	—	—	—
2			27	33	24	.43	.44	58	56	SE	S	Foggy	Fine	—
3			26	40	26	.46	.44	58	60	S	SW	Fog	—	—
4		☉	35	45	35	.28	.14	60	69	W	W	Foggy	Rain	Rain
5	.07		45	41	38	.03	.19	69	69	NW	WNW	Foggy	Cloudy	Cloudy
6			40	43	40	.22	.10	70	70	NW	NW	Foggy	Sleet	Cloudy
7			43	46	38	.03	.02	70	68	WNW	WNW	Cloudy	Cloudy	Snow'y
8	.02		39	40	35	.18	.22	67	67	E	NW	Cloudy	Cloudy	Cloudy
9			40	43	37	.20	.20	67	65	W	N	Foggy	Fine	Cloudy
10			38	42	38	.30	.21	65	65	NSE	SE	Fine	Fine	—
11		☾	41	42	37	.21	.19	67	69	WSW	WNW	Rain	Cloudy	Cloudy
12			39	41	42	.15	.06	69	70	WNW	WSW	Cloudy	Sleet	Sleet
13	.03		45	48	39	.03	.03	71	65	NW	NW	Sleet	Fine	Cloudy
14			44	47	43	.03	30.00	62	60	W	WSW	Foggy	Fine	Fine
15			46	50	45	30.00	29.95	64	64	SW	SW	Fine	Cloudy	Cloudy
16			45	51	41	29.87	.76	65	65	SW	SW	Foggy	Cloudy	Cloudy
17			43	48	36	.05	.75	65	64	W	ESE	Fine	Fine	Fine
18			38	39	36	.74	.70	64	63	ESE	SEva.	—	—	Cloudy
19		○	39	48	39	.55	.45	63	65	SE	SSW	—	—	Fine

The quantity of Rain fallen in the month of January cannot be given, the Rain-gauge having been frozen.

NOTICES.

In answer to Dr. R. and Mr. M., the Editors beg to refer to the statement at the head of the Monthly List of Medical Books.

The letter of H. is too personal for insertion in our Journal. The same appeal has been made to Mr. Hicks, by a Correspondent in the Medical Gazette, in a more proper, because in a more temperate manner. Mr. Hicks is bound to reply: if he does not, his professional brethren will justly complain.

For the Bostonian Lib.

THE LONDON Medical and Physical Journal.

NO. 362, VOL. LXI.]

APRIL, 1829.

[NO. 34, *New Series*.]

For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work, to which the Faculty, in Europe and America, were under deeper obligations than to the *Medical and Physical Journal of London*, now forming a long, but an invaluable series.—RUSH.

ORIGINAL PAPERS, AND CASES, OBTAINED FROM PUBLIC INSTITUTIONS AND OTHER AUTHENTIC SOURCES.

DISEASES IN DEMERARA.

Cases; by EDWARD BARCOME, Esq. George Town, Demerara.
(Communicated by Dr. JAMES JOHNSON.)

Colica Pictorum.

WILLIAM LYNCH, aged twenty-seven, of a spare habit, by trade a tailor, states that on Friday last (five days back), while at breakfast, he felt a disinclination to eat, and nausea; soon after, his bowels became affected with slight wandering pains, and, on going to the privy, he could not evacuate any thing. He took a dose of salts; which was repeated, without producing any effect on the bowels. The symptoms increased, and some rhubarb and calomel was taken: still no evacuation from the bowels. Vomited, soon after swallowing the powder, a large quantity of a greenish and bitter fluid.

Is now suffering greatly, tossing about in the bed, and cannot remain a moment in one position; says that he feels as if his belly will burst; cannot bear the slightest pressure on the abdomen, which is very tense. Headach; thirst insatiable; tongue white, and coated with mucus; mouth parched and dry; acid eructations; difficult micturition; urine high coloured; pulse full, tense, and frequent; temperature below the natural standard; cold clammy sweat; nausea, and vomiting of a greenish and bitter fluid. Has not slept for six nights; great prostration.

Fiat venæsectio ē brachio, stat. ut sang. emittatur ad 3x. dein applicetur scarificator, epigast. et region. umbilic. ad extract. sang. 3xviiij. Foment. calid. toto abdomini. Adhibeantur enem. emollient. omni semi-hora donec alvus bene respond. et habeat pro potu ordinario; decoct. hordei, &c.

Two P.M.—Says that he feels something easier; thirst not so urgent. The sixth enema, on coming away, was discoloured in a trifling degree. Abdomen less tense, but painful on pressure; pulse more natural; skin cool and comfortable.

Iterum appl. scarificator, toto abdomini ut sanguis extrahatur ad 3xxx.; et contiuantur foment. potus enemataque.

Eight P.M.—Bowels have been evacuated six times since last visit: a large quantity of very fetid matter discharged, having the appearance of oil and indurated feces. Says that he does not feel any pain, but a soreness, as if his belly had been scraped inside. Pulse soft, but rather frequent; thirst moderate; urine high coloured, but passed without difficulty. Perspires freely.

Cont. potus foment. enemataque.—R. Extract. Opii gr. ij.; Pulv. Jacobi gr. iss. M. fiat pilula, hora somni sumenda.

October 24th, morning.—Bowels have been evacuated four times since evening, evacuations more natural. Pulse regular; temperature natural; thirst moderate; tongue clean and moist. Says that he feels comfortable; has slept about four hours the last night.

Cont. potus enemataque sed omitt. foment.

25th.—Is convalescent.

26th —Improving. Ordered to continue on low diet for a week: arrow root, jelly, sago, light soups, &c.; and to open the bowels, if necessary, with emollient enemata.

Reflections on the foregoing Case; by Staff-Surgeon DOYLE, Bermuda.

It is to be lamented that nothing is said by the practitioner of the idiosyncrasy of the patient: whether he was of the sanguine, bilious, or nervous temperament; whether irritable, calm, or phlegmatic; what complexion, &c.; what previous malady or affection he had undergone, &c.: for all these are of importance to etiology, and to the study of the excitation of the different organs, if, as Borden and Bichât have told us, all the tissues of which the animal economy is composed have each of them a peculiar mode of action; a life, in fact, peculiar to itself. This action is susceptible of aberration; and it is in this that all patho-

logy must consist, says Broussais. Now, in order to render this important case instructive and profitable to medical science, it will be best to subject the group of symptoms which characterizes it to a rigid analysis, in order thereby to arrive at a knowledge of its true nature.

It appears that five days before (23d October,) this patient had a predominance of (morbid) irritation in the *stomach*, a viscus capable of exciting the greatest number of sympathies; for sensibility and contractility being distributed in different degrees in the divers tissues which make up the living organism, those which possess it in the highest degree receive the immediate action of stimulants, and transmit it to others. They are, for this reason, the natural movers of sympathies. The gastric disturbance was manifested by anorexia and nausea: this disturbance is rapidly communicated to the intestines, both smaller and larger; for, the more the sensibility of the irritated organ and that of the individual are considerable, the more the sympathies are multiplied, and vice versa. This propagation of the gastric irritation into the intestines occasions the wandering pains in the bowels and the desire to go to stool. The morbid congestion having invaded the ileo-cæcal valve, the ileum cannot force its stercoral contents through it: hence costiveness and the inability to pass any feces when at the privy. The two doses of salts, taken with a view to obviate this costiveness, in place of acting as a purgative, only aggravated the distress, by causing over excitation of the stomach and intestines. Then follow the rhubarb and calomel, which continued to add to the over stimulation of the stomach, which, being thus excited to the highest, discharged its contents, together with the secretions of its glandular appendages, the liver, spleen, and pancreas. Hence the vomiting, soon after swallowing the powder, of a large quantity of a greenish and bitter fluid: in fact, this over stimulation performs the office of an emetic, and thereby operates a partial revulsion of the morbid congestion. This partial revulsion procures a mitigation of the symptoms, and an alleviation of the sufferings of the patient, which lasts four days; at the end of which, the morbid sympathies, which have never been completely appeased and removed by any rational treatment, are aroused to an alarming activity, which may cause a rapid death through their excess, owing to the congestion and the disorganization of many viscera.

On the fifth day, when the practitioner is called, he finds the patient suffering greatly, tossing about the bed, and

cannot remain a moment in one position; says that he feels as if his belly would burst; cannot bear the slightest pressure on the abdomen, which is very tense: all which denotes that inflammation has invaded not only the mucous, sensitive, digestive surface of its intestinal canal, which causes tumefaction of the viscera, but it has also propagated itself to the serous membranes, particularly the peritoneum; a membrane rich in nervous expansions, and of exquisitely acute sensibility when suffering under active inflammation. Hence the tension and the impossibility to bear pressure on the abdomen. The headach denotes the participation of the sensorium, sympathetically irritated by the transmission to it of the sufferings of the viscera. The insatiable thirst denotes the inflammation predominating in the *ileum*; for, as there are two forms under which gastro-enteritis presents itself, I shall designate them here, in order to fix the seat of this terrible malady with as much precision as I am master of. The first form is that of predominancy of the gastric phlegmasia, which is characterized by gastric pain, by the aversion for ingesta, and the rejection of and the difficulty of supporting them. The second form is with predominancy of enteritis, or (as I understand it) of inflammation of the smaller intestine (*ileum*); for this insatiable thirst, and the rapidity with which the appropriated liquids are absorbed, characterize the second form: therefore I would infer that enteritis is predominating. The tongue white and coated with mucus, the mouth parched and dry, and the acid eructations, denote the complication of gastritis. The difficult micturition, and urine high coloured, denote the sympathetic participation of the urinary organs in this rapid and alarming phlegmasia. The pulse full, tense, and frequent, denotes the sympathetic participation of the heart, which is prevented thereby impelling the blood with measured force, and has its action precipitated. The temperature below the natural standard denotes the concentration of animal heat to be all in the inflamed viscera; too much vitality for the moment in the internal, and too little in the external, tissues. Same cause for the cold sweats. The nausea and vomiting of green bitter fluid denote association of gastritis. The want of sleep and great prostration denote the participation of the brain in the inflammatory suffering of the viscera.

I have thus gone through the whole group of symptoms detailed by the practitioner, and have endeavoured to analyze them according to the views of modern physiology as it

applies to pathology, in order to fix, with as much certainty as possible, the attention of our medical brethren upon the nature and seat of a malady so fatal as that denominated dry bellyach of hot climates.

The intestines have for too long a time been considered, when in a state of disease, only as conduits, more or less dirty, more or less filled with acrid irritating matters; the vapours of which, it was pretended, arose to disturb the brain. Under these views, the diseases of the intestines were reduced to two forms: first, the superabundance and the too great frequency of the dejections; secondly, the retention, the rarity, the thinness of these same dejections: in short, the two prevailing morbid states were *diarrhœa* and *constipation*. When blood was joined to the stercoral matters voided in diarrhœa, the name of *dysentery* was given to it; and, when vomiting accompanied the dejections, it was called *cholera*, and all the different shades of *lienteria*, *cœliac flux*, *hepatic flux*, *melæna*, &c. The pains which appeared to have their seat in the intestines were called *colic*, *ileus*, or *iliac passion*, when the fecal matters were voided by the mouth. The name of *tenesmus* was given to the sensation of tension referred to the anus. The presence of *worms* was added to this nomenclature; as was also the *intestinal tympanitis*, *hemorrhoids*, &c.; and finally, came *enteritis*.

From a more correct acquaintance with this latter disease, we know that, with the exception of mechanical derangements, all the affections above enumerated, and even more, belong, directly or indirectly, to morbid irritation, to the inflammation of these viscera; that ulceration, schirrus, intestinal cancer itself, is a consequence of enteritis or colitis. It is thus that we see daily the important part which the intestines play in the *production of fevers*. In short, the knowledge of this important fact is one of the keys to physiological pathology, that "so soon as *local* morbid irritation arises to a certain degree, it repeats itself, and is propagated into other systems, or into apparatuses more or less distant from the primitive focus, and always without changing its nature."

This fact discovers the secret tie which links the slightest with the most serious maladies. It fills up an immense blank which existed in medical science from the remotest antiquity; it destroys that insulation of the diverse shades of irritation, which may be regarded as the source of medical ontology; it reduces to their just value all the distinctions established by nosologists: take, for instance, the word

dysentery, composed of *dus* and *enteron*, what does this convey? *difficile intestinum*. Now, I would ask, in the name of common sense, how this difficulty has arisen in the intestine? what is its nature? and, if it be inflammation, why we are not told so.

It is with a view to the detection of like absurdities that these reflections are lengthened out, in order to recommend to our professional brethren to observe these maladies narrowly, by following an *external and visible* inflammatory irritation, abandoned to itself, from its commencement up to its highest degree of development; by observing it afterwards under the influence of modifiers, opposite in their effects; by comparing it in different sexes, and in climates the most opposite, we shall have the proof of what is meant to be expressed by the citation of the fact, "that, so soon as local morbid irritation arises to a certain degree of intensity, it propagates itself into other systems, or apparatuses more or less distant, and always without changing its nature." But as it is not so easy to make the same verification with respect to the morbid actions of organs deeply situated, we have only to exercise our memories in the practical observation of what passes on the outside of the body; and we shall find ourselves soon in a state to apply these observations to the viscera, the most deeply seated and the most concealed from our view, to the slightest shades of their irritation. I can assure our brethren, from experience, that they will find great pleasure in this species of study; for each succeeding day will dispel some doubt, will clear up some difficulty, and operate unexpected reconciliations on points that seemed before to be at variance. It is thus that we shall arrive at conviction; for it is impossible all at once, even for minds of deep penetration, to perceive at a glance all the consequences of a principle which is in itself no other than a conclusion resulting from the bringing together of an immense multitude of facts.

I hope, therefore, that the enlightened heads of the medical department will please to set our brethren employed in military-hospital practice to the observation of these principles in those terrible maladies called spasmodic cholera of India, dysentery, colica pictonum, &c.; for, in my opinion, they are only shades of different degrees of intensity of gastro-intestinal inflammation, complicated at one time with peritoneal, at another time with hepatic, and at others with splenic, nephritic, cystic, and encephalic irritations.

In this case, so successfully treated by my friend, Mr. Barcome, I would, in place of colica pictonum, designate it

Gastro-entero-Peritonitis; and I will venture to affirm, that, had the case terminated fatally, dissection would have shown the ravages of the inflammation to have been confined chiefly to the viscera from which I have designated it, and that the colon was but little or nothing inflamed; for it is not until inflammation passes the ileo-cæcal valve that colitis attended with diarrhœa supervenes; whereas, in the case before us, costiveness prevailed, which is the characteristic of enteritis, or inflammation of the small intestines.

But, perhaps, one of the most important facts for medical science, to be gained from the contemplation of this case, is this, viz. that, in intestinal inflammation, local depletion, antiphlogistics, and emollients, are the real purgatives. For it was not until a reduction of the morbid congestion, effected by their means, was brought about, that any fecal matters could pass into the cæcum through the inflamed opening of the ileum; the drastics, given with a view to purge, only aggravated the inflammation, and added to the danger.

(Signed)

CHARLES DOYLE, M.D. F.M.O. Bermuda.

Morbid Enlargement of the Scrotum. By E. BARCOME, Esq.

William Kendell, native black of this colony, twenty-eight years old, is a well made, muscular man; occupation, that of a tailor; had always been healthy till within the last four years; was much exposed for several weeks, during martial law, as a private in the militia, at which time the right leg became painful, and swelled as high as the knee; soon after, the scrotum became similarly affected, and has increased to the present size. During this period has been subject to occasional attacks of intermittent fever.

Tumor broad at the bottom, and suspended by a narrow neck from the pubis; exterior covered with rugæ of different dimensions. Extremity of the prepuce has the appearance of a navel, from which the urine trickles. Does not evince any pain or suffering of any kind on exercising pressure; only inconvenience from its weight and bulk, which prevents his walking or leaving his house.

Operation.—Avoiding the corpora cavernosa, two oblique incisions were made, commencing at the opening of the prepuce, and continued along the sides of the tumor, meeting below the testes. The dissection was continued to the tunica vaginalis; on cutting into which, a large quantity of limpid fluid (twenty-five ounces) escaped from the left side.

The left testis was found to be schirrous, and was removed in the usual manner. The spermatic vein and artery were the only vessels necessary to be secured during the operation, at which but little blood was lost. The integuments spared by the scalpel were drawn over the parts exposed, and held together by means of stitches and adhesive plaster, assisted by a bandage.

The tumor, on examination after its removal, was found little vascular, and appeared to be composed of a bacon-like substance, intermixed with hydatids. Weight, twenty-five pounds.

July.—Twenty-six days after the operation, the parts were healed, and the patient is now able to walk about and attend to his business.

Sudden Death, from Rupture of the Aorta Ascendens, &c.

By E. BARCÔME, Esq.

September 26th, 1827.—Benjamin, a black man, a native of Bermuda, and sailor on board the brig Atlantic, from Newfoundland, is a short, muscular man; was blistered while at Newfoundland, and some pectoral medicines ordered for a cough, &c. On his arrival in this colony, which was ten or fifteen days previous to his death, he did not complain much, except of a slight pain and heat in the chest, with trifling cough and occasional constriction, of which no notice was taken, and he continued at his duty as a seaman on board. This morning, on attempting to assist in hoisting out a cask, he suddenly fell down, and expired.

Dissection.—On opening the thoracic cavity, a quantity of serous fluid, amounting to a pint, made its escape, and the pericardium was seen distended greatly, to about four or five times its natural size; on cutting it open, a quantity of dark grumous coagulated blood was observed therein, say three pounds. On removing the heart, with a considerable portion of its appendages, the aorta ascendens was found ossified and ulcerated, with a small rupture, about half an inch, where it emerges from the right ventricle, with appearances of high inflammation and aneurismal dilatation. The viscus itself rather smaller than natural, with its parietes much thickened, and the capacity of the ventricles, particularly of the right, greatly lessened; nothing remarkable in the valves. The pericardium had some few red spots on its internal tunic. The abdominal, with the pelvic, viscera, sound.

DISEASED KNEE-JOINT.

Case of Diseased Knee-Joint, with Amputation of the Thigh. By
 MR. SAMUEL WILLIAMS JEWEL, Assistant Surgeon to H. M.
 Ship Warspite, Plymouth.

THOMAS SOLOMAN, ætatis fourteen, received a severe blow in the right knee, which caused immediate and extensive inflammation in the joint. A practitioner was sent for, who employed the usual means adopted in similar cases, such as the application of leeches, poultices, purgatives, and ultimately blisters, without so much reduction of the swelling as had been anticipated. The parents of the boy, finding that the swelling did not subside, consulted a quack of notorious celebrity for the cure of diseased joints, who, after using a variety of remedies for a period of five months, recommended the application of a poultice composed in part of quick lime, that, as he stated, a discharge might be produced, which would tend much to the recovery of the limb.

Having at this time been requested to see the patient, I found the knee enormously enlarged, measuring in circumference seventeen inches, and the tumor occupying nearly two-thirds of the thigh. Finding the tumor to have assumed a highly malignant character, with great constitutional derangement, I advised amputation of the limb without loss of time, which was consented to two days afterwards. The operation was performed as follows:

Having requested an assistant to compress the artery at the groin with his thumb, I commenced the operation in the usual way, by making a circular incision through the integuments, above five inches below Poupart's ligament; dissecting them from the superficial layer of muscles, and everting them about three inches; a second incision was made, commencing at the base of the integuments, dividing the first layer of muscles, and afterwards the deeper seated, carefully denuding the bone, which was sawed through. The femoral, ischiatic, and four small perforating arteries were secured, and the edges of the wound brought together. The integument and a large cushion of muscle formed a good covering for the bone.

The healing of the stump was rapid, and the boy was able to sit up between the second and third week. Five of the ligatures came away on the twelfth, and the other, from the femoral artery, on the fifteenth day.

The removed limb was found to weigh thirty-five pounds, notwithstanding a quantity of serum had escaped. Upon

opening the joint, about an ounce and a half of synovial fluid escaped; and, upon close examination, I discovered a large excrescence of fungoid bone, arising by a small pedicle from the inner and upper surface of the inner condyle, and a smaller one on the outer. The crucial ligaments and semilunar cartilages were displaced from their original situations, and the reflected synovial membrane was much thickened and considerably inflamed. The tibia had also participated in the disease, from the numerous spiculæ of bone projecting into the cavity of the joint. The periosteum was found detached half way up the shaft of the bone; and the bone itself, when sawed through longitudinally, was found to be much more cancellated than natural.

February 24th, 1829.

POISONING BY THE BERRIES OF CORIARIA MYRTIFOLIA.

*Four Cases of Poisoning by the Berries of Coriaria Myrtifolia.**

By Dr. A. Roux, Head Surgeon of the Hôtel-Dieu of Montaubon.

- ON the 15th July, 1828, four little girls, named Rose Bertrand, Eulalie and Nancy Chapelle, and Julie Dompeyre, respectively eight, seven, six, and three years and a half old, while strolling among the hedges in the neighbourhood of Montaubon, inadvertently gathered and ate a considerable number of the berries of the Coriaria Myrtifolia, being deceived by their resemblance to the fruit of the Rubies scæsius and Fruticosus, (the blackberry and dewberry.) Rose and Eulalie ate fewer berries than their companions: Nancy only thirty, and Julie from eighty to a hundred; according to the account of those who have survived the effects of the poison.

Half an hour after eating the poisonous berries, Julie was affected as follows: a warm pungent sensation in the tongue, the signs of intoxication, the eyes sparkling and rolling constantly about, the countenance livid, convulsions and trismus, and loss of speech, which this patient never once recovered afterwards. The symptoms of poisoning commenced at half-past six P.M., and the little patient was consigned to the care of Dr. Roux about an hour afterwards.

Dr. Roux thus describes her state when he first saw her:

* The tanners, or myrtle-leaved Smach; a genus of the Decandria order, belonging to the Diœcia class, and in the natural method ranking under the 34th order Miscellanæ.—EDITORS.

the face was bloated and livid, the eyes bright and rolling in their sockets, with dilated pupils; she was affected with convulsive motions, of short duration in general, though they continued longer in the limbs of the left side; she had trismus, foaming at the mouth, and flexion of the fingers, as in epileptic patients. The abdomen presented no unusual appearance; and the pulse was not very quick, but rather full.

A large dose of olive-oil was administered to the patient, which was followed by copious vomiting of the deleterious fruit, mixed with thick tenacious mucus; after which, a repetition of the same remedy was ordered, with a table-spoonful of orange-flower water.

At eight o'clock, milk and oil were alternately prescribed; and the patient continues in the same state as at first.

At nine o'clock.—The convulsions last eight or ten minutes at a time, and are separated by nearly equal intervals of repose. The commencement of each paroxysm is preceded by loud groans, five or six times repeated. The belly is becoming tympanitic, but is not tender. The patient bears severe pinching without any sign of pain. The pulse is becoming weaker.—Enemata of milk ordered to be repeatedly injected.

Eleven o'clock.—The head appears to be still more affected. Ten leeches to the legs; continuation of the clysters. The clysters bring away portions of imperfectly digested berries. The pulse is becoming stronger.

Midnight.—The convulsive paroxysms are shorter, and return more speedily.—The clysters as before.

Five o'clock A.M.—Dr. Raynaud visited the patient: he found the pulse small and feeble, and observed the same symptoms as those last described. He ordered that ten leeches should be applied behind the ears, and that the patient should be immersed in a bath.

Eight o'clock A.M.—The disease is in every respect more severe, and the cerebral disorder is particularly increased.

The patient died on the 14th, at half-past ten A.M. The body being immediately examined, the following appearances were observed:

The whole body is stiff, and the fingers still retain the convulsive crook; face pale, the lips livid; the belly very tympanitic and livid; the subcutaneous cellular membrane was every where, except at the feet and anterior part of the tibia, highly vascular. The membranes of the brain were much injected; there was a very small extravasation at the base of the cranium; the brain was healthy; the

plexus choroides pale; there was a small quantity of serum in the fourth ventricle; the others were empty, and of a natural appearance. The spinal cord seemed healthy, but its membranes were injected. The heart and pericardium were sound; the left ventricle full of blood. The right lung was hepatized at the posterior part of the lower lobe, and in the centre of this part there were some osseous granulations. On the left side, toward the lower portion of the lung, was a more recent hepatization, which distilled a frothy kind of serum, of the colour of chocolate. In every part this lung was sound, and crepitated when pressed together, but was in general gorged with blood. The œsophagus was inflamed at its cardiac orifice.

The interior of the abdomen was livid like the exterior. The stomach and intestines were greatly distended with gas. The stomach and large intestines externally had the colour of grey satin; the small intestines and omentum presented here and there small patches of red; but the mesentery was studded with glands decidedly redder than the intestine to which they corresponded. The inner surface of the stomach was of its natural colour, except at its greatest extremity, where there was a red spot of the size of half a crown. Five or six red patches were observed on the internal surface of the intestine; and about twenty lumbrici, of various dimensions, near the middle of the small intestines.

Julie had always enjoyed excellent health: she did not readily take cold, was never subject to colic, her respiration was free and natural; she ate heartily, and at different periods had received blows on the head.

Nancy Chapelle swallowed about thirty berries of sumach, and in three quarters of an hour was affected with headach, colic, and convulsion, sometimes resembling tetanus, locked jaw, foaming at the mouth, and rolling about of the eyes. She took a grain of tartar emetic in olive oil and milk, which caused her to vomit up about twenty of the berries.

Eulalie Chapelle ate about twenty of the same berries. About an hour afterwards she was seized with a hot pungent sensation in the tongue, with headach, and trembling of the limbs. Milk and oil were prescribed, which caused her to vomit up a part of the poisonous fruit.

After the cessation of the first effects of the poison, Nancy and Eulalie remained during four hours in a comatose state, for which no remedy was administered. They slept the remainder of the night, and awoke in the morning perfectly well.

Rose Bertrand took only about fifteen of these berries, and was affected, within an hour afterwards, with headach, colic, and an acute pain at the epigastrium. She swallowed large doses of milk and oil, which did not, however, occasion immediate vomiting, and she afterwards took a light supper. About six in the morning she vomited a great deal, yet it was impossible to distinguish the smallest atom of the fatal berries among that which her stomach threw off. On the following day she was well.

Fortunately, poisoning with the berries of sumach is of very rare occurrence, and Dr. Roux affirms that there are only three other well-attested cases upon record: two related by SAUVAGES DELACROIX, (Académie Royale des Sciences, 1739,) and another by M. PEIYADE, physician to the army of the Pyrenees, in 1811. M. Sauvages informs us that, in September 1731, a child happening to eat some of the berries of the *coriaria myrtifolia*, was soon afterwards, on returning home, suddenly seized with epileptic fits, which were so violent that she died the next day, in spite of all the remedies which are commonly used in that complaint. The following year, in the same month, a robust labouring man, about forty years old, being extremely thirsty, had the rashness to swallow about fifteen of these berries. In half an hour he was seized with one or two paroxysms of epilepsy, for which he was bled; but, as these paroxysms became more frequent, he was brought to the Hôtel Dieu, where Sauvages, on visiting him, found him in one of those paroxysms above described, without any signs of consciousness, of a livid complexion, and in constant danger of falling out of bed if left alone. An emetic was given him in the interval of the fits, which brought up eight or nine of the said berries; but the same evening he expired, during an attack of the fifteenth paroxysm. The body was examined with care, but nothing could be discovered in the brain or stomach, or indeed any where else, which could be fairly considered the cause of his death, excepting that the stomach still contained five or six berries. M. Sauvages concludes by remarking that he had endeavoured to ascertain the *modus operandi* of this poisonous shrub, but totally without success.

The account which M. Peiyade gives on this subject is analogous to that of Sauvages, but is the result of greater experience. Ten young soldiers in Catalonia ate some berries of the *coriaria myrtifolia*, and were not brought to him until two of them were already dead, and the remainder in a comatose state. He forthwith administered an

emetic, which brought off the stomach some indigested berries. He afterwards gave them acidulated drinks, and employed friction and blisters; and, to alleviate the colic, he prescribed mucilaginous substances.

Two experiments in regard to these berries have been made on the lower animals. The first subject of these investigations was a rabbit, who had swallowed four drachms of the extract of this fruit without exhibiting any visible effect from it whatsoever. A puppy was made the subject of a similar experiment, and it showed no signs of disturbance either in the cerebral or digestive functions. Neither the puppy nor the rabbit evinced any symptoms of poison.

Dr. Roux, on the authority of his own personal experience, and that of the well-attested facts which, together with his own, compose the present article, ventures to draw the following conclusions:

1. That the berries of the *coriaria myrtifolia* are poison to the human species.

2. That the deleterious principle exerts its influence chiefly on the brain and the spinal cord.

3. That a very small quantity only is sufficient to destroy life.

4. But, notwithstanding, there are circumstances, as in the case of a full stomach, for example, when the dose must be very large to prove fatal.

5. That the most dangerous time for the patient is during the violence of the convulsions.

6. That, when coma supervenes, the danger is nearly over.

7. That poison acts in the same way as the acrid narcotics do.

Dr. Roux fancies that his two penultimate inferences may at first sight appear untenable to some members of the profession; but he defends them by reminding us that, in both the instances noticed by Sauvages, the patient died during the acute stage; that, of the ten soldiers mentioned by Peiyade, only two died, and they died during the acute stage; and that Julie Dompeyre likewise died at that period of the disorder. While, on the contrary, the remaining eight soldiers treated by M. Peiyade were comatose, and recovered; that Nancy and Eulalie Chapelle, who became comatose, also recovered. Dr. Roux, therefore, thinks that his conclusions are warranted and supported by all our present information on the subject.

Dr. Roux thinks that until, by the aid of vegetable chemistry, we discover the nature of the venenose principle

which lies concealed in the berries of the *coriaria myrtifolia* (cases of poisoning by this substance being very rare), it will be impossible to establish its treatment on scientific principles; but that we must at present content ourselves with combating merely the most prominent symptoms, and attend to those evident indications upon which there can exist no difference of opinion. Our first object should, therefore, be to evacuate the contents of the stomach. He recommends the employment of acidulated potions on the first knowledge of the occurrence; and the cautious use of mild opiates as soon as the abdomen is becoming tympanitic. Oily and mucilaginous clysters, emollient fomentations, should also be used; and potions likewise, of similar qualities. Congestion in any organ demands vascular depletion, either local or derivative. The judicious use of blisters, and friction of the limbs, either with or without the aid of embrocations, might too, if varied according to circumstances, be ranked as means for opposing the further effects of this poison.

The berries of the myrtle-leaved sumach are not its only deleterious parts; the leaves and stem likewise possess deadly properties. The young sprouts always produce temporary intoxication in those animals which crop them: nay, more, when they feed immoderately off them, their death from this cause is of no uncommon occurrence.

Although Sauvages, confiding in the result of his own experiments, positively asserts the contrary to all this, yet Dr. Roux's opinions are not in the least changed by such an authority, since he informs us that he has frequently seen sheep go into convulsions, and die, from eating the stems only of the sumach. Besides, it is well known that in the south of France, where this shrub is common, the shepherds, who are well acquainted with its properties, as soon as they discover that one of their flock has eaten of its branches merely, drive it from pasture, and endeavour to make it vomit.

TREATMENT OF BURNS.

Cases of Burns treated by the Application of Flour.

By J. MARSHALL, Esq. Surgeon.

THE minutes of the following case of a severe and extensive burn, with two slighter ones, may probably be deemed worthy of publicity through the medium of the London Medical Journal, with a view to exemplify the practical effects of a simple but highly efficacious remedy. Previously to entering upon a detail of the symptoms, it is deemed expe-

dient to make a few cursory physiological and practical observations on the *modus curandi* of this remedy.

This mild substance is doubtless preeminent to all others hitherto in use, by imparting immediate ease to the inflamed and irritable surface; it rapidly heals by the scabbing process, in uniting with the discharge from the abraded cutis; and almost instantaneously forms a temporary semi-transparent covering, thereby assisting the natural functions in restoring the epidermis. The advantage becomes evident by stopping a profuse discharge, and the tedious progress of ulceration. That remarkable substance, the animal gluten, peculiarly contained in wheat, seems in this instance to assist the rapid regeneration of the scarfskin, and thus protects the cutis and rete mucosum. The surface of the body being wonderfully supplied by the extension of the cutaneous nerves in the form of a soft pulpy membrane, somewhat resembling the expansion of the optic nerve on the retina, readily affords, it is presumed, an explanation of the great violence offered to the system in all cases of extensive burn or scald.

This topical remedy is equally suitable to either of these accidents, and perhaps eventually will be found useful in many other cutaneous affections. It has been recently tried by me in the case of an infant three months old, who laboured under an inflammation attended with ulceration, pouring forth an ichorous discharge: the parts affected were the lips and chin, the right groin, the scrotum, the inside of the right thigh and leg down to the toes. The result was most satisfactory: some parts healed in a few hours, and the whole surface in three or four days. The thickened state of the scrotum, although unavoidably exposed to the frequent irritation of urine, also yielded.

When the flour has formed the artificial covering, the further application becomes comparatively superfluous; which is perceived by its rolling off. This circumstance may be demonstrated by the following example, which equally applies to the manner in which all the other ulcers were healed. The external surface of the nose, from the destruction of the scarfskin, was ulcerated: in the evening it had ceased to discharge, and was apparently healed; the swelling had likewise subsided, and the part assumed its proper size and form: the flour became unnecessary, no longer resting on its surface. This ulcer was particularly regarded, under an impression that the skin of the face, from its peculiar structure, is susceptible of a greater degree of irritability than other parts.

In the lady's case, when the cuticle was completely renovated in some places, though not generally, it imparted a very peculiar feel to the touch, by resembling the dryness and smoothness of parchment: the whole covering of the biceps muscle of the right arm was thus circumstanced. Probably this may be ascribed to the advanced age and previously emaciated state of the patient. This new healed part was of a dark livid purple, which occurred in many other places, accompanied with a similar sensation.

Mr. B. scalded the back of his hand and fingers with steam: he consulted me four days afterwards. The parts were inflamed and swollen, with three blisters going into a state of suppuration. By applying the flour every hour, in less than two days the swelling, inflammation, and ulceration, were completely cured, although the patient had been many years in the habit of indulging freely in ardent spirits. On extending the hand, the back was corrugated, and the cuticle rather stiff and polished.

A boy scalded the left ankle-joint and upper part of the foot. He had applied Goulard's lotion the first two days; and afterwards a dressing, spread on lint, of red precipitate rubbed down with yellow basilicon. Five days after the accident I saw the patient: the part was highly inflamed, and nearly covered with blisters, which had been injudiciously opened, in a state of rapidly spreading ulceration, with a purulent discharge. He could neither use the joint nor bend the toes, being stiff from painful distention. The stimulating dressing was carefully wiped off, where practicable, and the flour substituted. The youth expressed immediate relief. He was directed to apply it every hour during the day, and as often as he awoke in the night, and, wherever the discharge issued through the layer, to apply the flour more assiduously.

Second day.—The patient had passed a good night. Swelling nearly subsided; the surrounding inflammation gone; the ulcers mostly healed: one of them still contained a portion of fluid, and another, near the inner ankle, gave out a discharge of matter. He moved the toes and ankle-joint freely. The change was very remarkable.

Third day.—The fluctuating matter that appeared on the preceding day was wholly absorbed. Patient free from pain. The ulcer near the inner ankle gave off a trifling discharge. On removing from the surface the coat of flour to inspect the character of the granulation, it was found in

a most healthy and healing condition. The frightful aspect of a general, ill-conditioned, and irritable ulcer, which threatened mischief on the first view, was effectually removed.

Fourth day.—The surface of the part affected was washed with tepid water, in order to obtain a full view of its state. The whole was healed, except in two small places, not so large as a horsebean, which were in a healthy healing condition. The new skin was of a red hue, and shining.

Mrs. H., a lady in her eighty-fifth year, possessing a good constitution, but greatly emaciated by age, accidentally set fire to her clothes. Her face was much swollen; the hair, eyebrows, and lashes destroyed. It was impossible to recognise her features. The closed and thickened eyelids were opened with difficulty. The other parts injured were the neck, chest, ribs, the back (exceeding half its length), the arms, from the shoulders to the finger ends. The cuticle was raised into numerous blisters, the size of walnuts, on the swollen fingers, palms, and backs of the hands; the epidermis loosely hanging in flakes or tatters on the back, arms, and ribs. This extensive surface, coloured by various hues of red, yellow, and purple, discharged a profuse ichorous and purulent matter. Skin hot; quick, irritable pulse; white tongue, great thirst, and incessant moaning, arising from her sufferings, accompanied by the most afflicting state of mental anxiety.

It is to be regretted that this state of disease was permitted to remain unassisted full twelve hours. On the free application of the flour to the whole surface, the patient ceased to moan, the spirits revived, and she expressed the greatest relief. The flour was applied every hour, but more frequently wherever an oozing of discharge appeared.

In the evening, the skin was cool; pulse steady, eighty-two; the countenance restored to its natural appearance; injured parts looking much better; the discharge generally reduced; bowels had been relieved by an aperient; tongue moist and clean.

On the following morning, (second day,) the patient was cheerful; had slept four hours during the night; had partaken freely of diluents; tongue clean; pulse seventy-eight, skin temperate.

In the evening, no alteration, but the surface more generally healed, and the discharge almost wholly subsided. From so decided an improvement, and the absence of symptomatic fever, hopes were entertained of recovery.

On the morning of the third day, the lady had passed a tranquil night, with intervals of sleep; the tongue had a brown tinge, but moist. Hitherto a febrifuge draught had been taken occasionally; a tonic was now substituted, with Infus. Rosæ et Spiritus Ætheris Nitrosi, and a gentle laxative.

In the evening, the pulse 100; tongue darker brown; skin hot and dry; respiration hurried. Ordered Inf. Rosæ cum Sulph. Quinæ.

The fourth day.—The bowels open. She had passed a restless night, with muttering delirium; subsultus tendinum; pulse 110, skin hot. These symptoms increased towards night.

On the fifth day, the tongue was black and parched; sordes on the lips; great difficulty of deglutition, speechless and convulsed.

She died about five o'clock the following morning.

As the local affection was so happily relieved, and the symptomatic fever for a time suspended, the immediate cause of death must be attributed to the violent shock the system had sustained, together with extreme old age. The case, however, forcibly illustrates the healing effects of flour. The ease with which it is directed by the dredger, and reapplied, without handling or disturbing the parts affected, may suffice to demonstrate, with the foregoing cases and observations, the superiority it possesses over all former dressings. By checking the progress of severe ulceration, it will effectually prevent the frightful scar, the wry neck, contracted limb, and destruction of parts by sloughing.

53, Jermyn street, St. James's.

DIABETES.

Case of Diabetes, successfully treated. By G. T. BURNETT, Esq.
DECEMBER 31st, 1823.—Consulted by Mr. J. H., aged forty-seven, who states that for some time past, (at least for several, perhaps for many months,) he has been in not quite such good health as he formerly enjoyed. Of the change he himself is conscious, and his family have remarked his altered look; but, as no pain is suffered, and as he is able to transact his usual business, (wholesale spirit merchant,) he has hitherto not sought medical advice. He has lately lost much flesh, but, as his appetite continued good, even better than ordinary, this wasting was at first attributed to over-exertion and fatigue in business.

The present complaints are chiefly thirst, which has been gradually increasing, and is now constant and distressing, the mouth being ever dry or clammy, requiring to be continually moistened. During the day and in the night he drinks two or three pints of thin gruel or water. His countenance has lost its natural healthy colour and roundness, and has assumed a pale and sharp appearance; the lips are dry and cracking, and the whole skin extremely harsh. Perspirations, which used to be considerable on exertion, entirely stopped, and the urine greatly increased in quantity. These symptoms have been gradually coming on for a considerable time, yet they remained unnoticed; and it was not until the frequent desire during the day, and the necessity of rising several times during the night, to discharge the water, became very troublesome and disturbed his rest, that they excited attention. He now gets up five or six times during the night, and passes in general seven or eight pints (often more) of urine; and, in the day, he says he can scarcely walk half a mile without stopping for the same purpose; and he observes that, wherever the urine splashes, it leaves a whitish sticky spot, of which he shows many at the lower part of his trowsers. Pulse frequent, not full; tongue furred, white at the edges, brownish in the centre; bowels open daily; urine of a pale straw colour, bitter sweetish taste, and perfumy, does not deposit any sediment on cooling.

Purges ordered, with sudorific medicines; spirits and vegetable food prohibited; animal diet strictly enjoined.

These directions were partially complied with for about a week or ten days; but, being impatient of restraint, the thirst being a little relieved, appetite great, strength little impaired, and business urgent, they were then neglected.

March 10th, 1824.—Since the last report the disease has been gradually establishing itself, and the symptoms becoming daily more urgent: repetition would be useless; they are the same as above noted, only increased in severity. The emaciation is very considerable, so much so that his family say that they "can see him fall away." His clothes, which used to fit tightly, are much too loose, and hang in folds. Some degree of lassitude has shown itself. Appetite truly voracious. Having, in answer to some inquiries, stated his complaint to be diabetes, and Mrs. H. studying Buchan, they are now much alarmed, and willing to submit to any treatment.

Former directions repeated, and former treatment resumed.

March 11th, 12th, 13th, and 14th.—No amendment. Thirst quite as great, urine as copious; skin very dry and often hot, but not the slightest moisture.—Let the sudorific medicines (viz. Pulv. Ipecac. c. gr. xij.; Pulv. Antim. gr. v.; Pulv. Acaciæ Oss.) be taken at seven, and again at ten each evening; and, an hour after each powder, Liq. Amm. Acet. ℥i.; Mist. Camph. ℥ss. Let the feet and legs be placed in hot water, the bed warmed, and abundance of warm milk-and-water given him to drink. Let him keep in a warm room during the day, and take saline sudorifics, and *Haust. Sennæ* every alternate morning.

18th.—A slight degree of moisture appeared on the chest last night, which 'has raised hope and encourages perseverance. Other things as before.

22d.—Perspirations have slightly increased each night; thirst perhaps not quite so troublesome; lips parched and cracked; urine still as copious, sweet both to taste and smell: on evaporation, it affords a large quantity of bitter sweet extractive matter, of a brown colour; upwards of one ounce from a pint of urine.

23d.—Sickness came on last night, and the medicines rejected.—Let only one powder and draught be taken each night, and the laxative medicine in the morning.

25th.—Perspiration lessened; other symptoms as before.—Let the double doses be again exhibited for one night.

27th.—Perspirations very free; tongue less furred; urine less abundant, but still unnaturally copious. Passed last night without being once disturbed, which has not happened for many months before. The lips are less parched, the thirst much less, and the countenance improving, having lost some of its anxiety and sharpness.

29th.—All going on favorably; urine reduced to its natural quantity, or nearly so; but Mr. H. presumes too much on his recovery, and appears anxious to discontinue the medicines.—The ordinary cautions given, and warm sea-bathing recommended during the summer.

Health continued good for several months: cautious living, sea air, bathing, &c. seemed to have completely re-established him. When I occasionally met him, he appeared delighted with the change, but showed evidently that he thought he had been the best judge as to the period of discontinuing the medicine.

October.—Having been to two public dinners within a week, and indulged rather too freely in the pleasures of the table, I was applied to on the 14th. He was much dejected

by the return of his old symptoms, though in a milder form, and, although the harshness of skin, thirst, and abundance of urine had not returned above a week, the change in his appearance was surprising; the sharpness of the features, and sallowness and anxiety, were so great. The treatment before so successfully pursued was again resorted to: in less than a week the diseased actions were subdued, and within a fortnight all unpleasant symptoms were removed.

January 9th, 1825.—Having neglected to observe due caution as to diet, exercise, and exposure, the tendency to diabetes has again shown itself. The flesh which had been gained during the summer and autumn is now diminishing, and that very rapidly. The symptoms again yielded to the treatment previously detailed: within a week they were much abated, and by February 2d the sudorifics were discontinued, and mineral acid prescribed for a fortnight.

In May, from the nature of his business, having been again obliged to attend some public dinners, he had another return of the diabetic symptoms, and under similar treatment they were again removed.

November 17th.—I was again sent to; for his frequent recovery seemed now to have rendered him less cautious. To endeavour to impress him with the necessity of attending to diet, and abstaining from excess in liquors, an eminent physician was consulted, and, with the previous history of its efficacy, similar treatment was adopted, with a similar result.

In the following March (1826,) another slight relapse followed some accidental irregularity; and, to wean him from public dinners, I recommended him to take a country house, and amuse himself in gardening; which he did, and since then, with caution on his own part, aided by the watchful care of an anxious wife, he has avoided any further relapse; his health has been uniformly good, and when I saw him (March 9th, 1829,) he was "as hale and hearty" as ever he felt in his life; and, excepting slight cough, and that only *slight* and occasional, he has had no illness, and has taken no medicine, save domestic aperients, for the last three years.

The observations on the foregoing case might perhaps be many, but they shall be few. To speculate on single instances, either of failure or success, is futile, and to generalize from such meagre experience would be absurd; yet, with respect to so interesting a disease, the pathology of which is so obscure, and the treatment of which is so unde-

cided, each additional fact must have its value, and, as many cases of a complaint so comparatively rare cannot be expected to fall under the notice of the same individual, it becomes the duty of every one to cast his mite into the treasury of public knowledge.

I have seen several cases of diabetes in hospital and other practice; I have watched them with considerable care; I have inquired into their history, examined their symptoms, noted their treatment, and anxiously waited for the result. I have seen most of the ordinary modes of treatment prescribed and persevered in for a considerable period, sometimes with temporary, but never with permanent relief; for there was not one that did not eventuate in the despair, either of the patient or the prescriber, or of both.

There is nothing novel in the treatment which cured the case that I have related, and there is but one practical point that it suggests: viz. that, although diaphoretics are frequently prescribed, they are seldom effectively administered; for it is a disease on which so little impression is made, and so little relief obtained, that hope becomes languid, and neglect supervenes. Furthermore, in the early stages of diabetes, in which perhaps it alone is curable, the difficulty is great to persuade a person, in some measure able to go through the duties of his calling, and whose appetite is good, to refrain from accustomed indulgences, and to persevere with an irksome treatment: hence remedies are too often imperfectly employed, and pursued for a very inadequate period.

*Great Marylebone street ;
March 9th, 1829.*

HOSPITAL REPORTS,

(Principally condensed from various Periodical Publications.)

OVARIAN SAC.

Description of an Ovarian Sac, in which Hair was found adhering to the Integuments of an extremely small Osseous Body, of an orbicular form, not unlike the Skull externally, and endowed with Organic Life. By A. REYNAUD. (LA CHARITÉ.)

ALTHOUGH it is not very unusual to find collections of hair accidentally developed in different parts of the body, and more particularly in the ovaries, the number of observations of this kind is not so considerable but that science may still profit by the discovery of a new fact; and it is with this conviction that we detail the following curious case.

A woman, twenty-four years old, was admitted into the hospital with severe ulceration of the breasts, in which large abscesses had formed, in consequence of very high inflammation which supervened early after delivery. She eventually died of this complaint, worn out by the excessive suppuration, pain, and fever with which it was attended. She had, within the twenty-seven months that preceded her illness, twice conceived, and brought forth a live and well-formed child each time.

The body was examined twenty-four hours after death, when the following anomalies were recorded:

The left ovary was found as large as an orange, free from unnatural adhesions, and situated in the pelvis anterior to the uterus, for which it was at first mistaken. It was thought surprising that the uterus should be so unusually large in the unimpregnated state, so long after delivery; but, on further investigation, it was suggested that this mass, since it externally resembled the uterus, might possibly be a case of extra-uterine pregnancy. Accordingly, the examination of the contents of this tumor was conducted with the greatest care and circumspection; and, on dividing it longitudinally, in a direction opposite to that in which the peritoneal covering of the ovary is inserted, a cavity was laid open, almost completely filled by a large wad of hair. These hairs were entangled together in the most complicated manner imaginable, and the space between them was filled with a substance like fat, semifluid, of a white gray, strongly scented, and somewhat resembling the sebaceous matter which, in some diseases of the hairy scalp, is secreted by the follicles of that part. This matter had been deposited on the internal surface of the cyst, where it was thicker than in other parts, and had the appearance of a false membrane. The extremities of many of the hairs were inserted into this membrane, and, on a first glance, they appeared to derive their origin thence; but, on detaching them from it, their

extremities were not found to be bulbous, but, on the contrary, very small, and much less like roots than points of hair: besides, some of these hairs passed only through this membranous substance, while both their ends were traced into some other part of the tumor.

These hairs were not all either of the same length or colour: a great number of them were flaxen, or indeed nearly red; they were generally short and slender; they were easily separated, without breaking, or, by their resistance, evincing in any way that they adhered to any part; whilst others, on the contrary, formed dark brown masses, from which, when carefully unravelled, some hairs might be drawn out more than a foot long: these were bigger and more hard than the first. Further investigations were made, to discover, if possible, in some point of this anomalous production, either the remnants of a fœtus, or some other portion of organized matter from which its origin might be deduced.

From a certain point of the internal surface of the ovary, a kind of fibrous pedicle was seen coming off, and penetrating deeply into the mass of hair; and, by careful dissection, it was traced into a substance of an irregular form, but nearly round, of the size of a walnut, bony towards its centre, enveloped in a membrane, and terminating in a point, whence two firm, fibro-cellular prolongations were sent off, to be separately inserted into a part of the sac diametrically opposite to that from which the pedicle arose. The membrane which covered it for the most part resembled the scalp in children affected with porrigo, after that the crusts have been detached by the use of detergent lotions; its external surface was moist, reddish, felt greasy, and gave insertion to a considerable number of hairs: when pulled out, a bulbous root was found attached to each, and amongst these hairs were the longest and darkest of all those which were contained in the ovary. Other hairs, of a lighter colour and much shorter, also adhered to its surface, which, in the intervals between the different hairs, presented a number of small indentations. Underneath this sort of skin there was a greasy membrane, extremely thin, but distinct, and very similar to that which lines the internal surface of the skin of the cranium. The bulbs of the hair were lodged in the substance of this second membrane, which closely adhered to this almost formless bony mass above described, and which could not certainly, by any effort of the imagination, be fancied to possess the smallest resemblance to the human fœtus. This unnatural production was convex where the hairs were found adhering, and in the opposite direction rather concave; in which part its investing membrane was of a serous kind, and did not contain a single hair. A blowpipe being insinuated below it by means of a small incision, it was dilated by the air thus introduced, and assumed the form of a bag, terminating in a cul-de-sac about the middle of the fibrous cords or prolongations already mentioned. Two or three blood-vessels were very distinctly seen extending

along one of these cords towards the osseous mass, and a great many very minute ramifications of them were distributed over the internal surface of that portion of the integument to which the hairs were found attached.

The pouch in which all these extraordinary objects were discovered consisted of three distinct coats. The external one was nothing but the fibro-serous covering of the ovary itself: it was internally lined by cellular membrane, vascular and more thick; which, lastly, was in contact with a thin, smooth membrane.

The right ovary exhibited nothing remarkable, excepting a little unevenness of its external surface, which was owing to several small cicatrices. The fallopian tubes were pervious; the uterus had resumed its natural dimensions, and its interior was red and vascular. Divided internally, its substance was found rather soft, and of a yellowish colour.

A greater or smaller quantity of hair, either by itself or together with teeth and other bony productions, have been repeatedly found in various parts of the body, and has been the subject of many learned discussions. MECKEL* has written an excellent dissertation on this subject, in which he has given an account of the different opinions which have been entertained by physiologists at various periods concerning the formation of these substances, with a critical estimate of their respective merits.

ENDERMIC METHOD OF USING REMEDIES.

Articular Rheumatism.—A young man, a mason, was admitted into the HÔPITAL COCHIN with acute rheumatism of the joints, and a gastro-enteritis. In all his joints, but particularly in his arms, he had excruciating pains and stiffness, by which he was rendered incapable of motion. There were likewise frequent sweats; orbital headach, foul tongue, quick pulse, and constipation. By repeated bloodletting and leeches the pain was removed from the abdomen; but it continued without abatement elsewhere, and the accompanying fever assumed the adynamic form. The leechbites on the belly being carefully cleaned, half a grain of morphia was introduced into them, and with the effect of procuring him a quiet night's rest, and subsequent alleviation of all his pains and uneasiness. The morphia having been then intermitted, the pains returned severely. They were alleviated, however, by a blister on the right thigh, but soon recurred with equal violence, and continued so for eleven days. Half a grain of morphia was then applied to the blistered surface, and it was followed by complete absence of pain and refreshing sleep. Next day the morphia was given by mistake internally, and caused bilious vomiting, dry tongue, stupor, and somnolency. The rheumatic pains, however, continued to abate, and soon ceased altogether, without any further application of the remedy.

* Tome quatrième du Journal Complément. des Sciences Médicales.

Sciatica.—A middle-aged man was suddenly seized with this complaint in the left haunch, and, after suffering severely for three weeks, got gradually better by wearing a Burgundy pitch plaster. But, after having been again at his work for nearly six weeks, he had a more severe attack than the former, by which he was compelled to have recourse to an hospital. The left limb was considerably emaciated, the knee rigidly bent, the whole movements of the limb accompanied with acute pain extending from the hip to the heel. In bed the pains were unceasing, and wholly prevented sleep. The toes at the same time were contracted involuntarily, the muscles affected with sub-sultus, the skin with a sense of creeping. Warm baths were of no avail. Two moxas applied near the chief seats of the pain caused full suppuration, with as little advantage. Half a grain of morphia was then applied to the suppurating surfaces; and in an hour the pains ceased, and the man fell asleep. The same treatment was continued for nearly six weeks with little intermission, the dose being first raised gradually to two grains, and then gradually diminished to one grain daily. At first every intermission, even for a single day only, was followed by a return of severe pain. But after six weeks, although the remedy was abandoned altogether, the disease gradually disappeared. On one occasion the morphia was given by mistake internally, and caused nausea, vomiting, stuttering, revery, tremors, dysuria, itching of the skin, succeeded by dulness, wildness of expression, and general discomfort.

Lead Palsy. CASE I.—A lapidary was attacked with colica pictonum in March 1824, and was cured of it at LA CHARITÉ. In January 1825, tremors having seized his arms, he returned to that hospital, and was again cured by baths and milk diet. In June he was seized with racking pains in his limbs and palsy of the hands, especially of the extensors of the fingers, which were quite powerless. Electro-puncture was tried with very little advantage, and subsequently friction with tincture of strychnia, without any relief. A blister was then applied on the outside of each forearm, and three days afterwards, while the paralysis was still as great as ever, half a grain of strychnia was sprinkled over the blistered surface on the right forearm. Next morning, the patient having in the interval slept soundly, he was greatly surprised to find that he could extend his right hand and fingers completely, while the left remained powerless as before. At night half a grain was sprinkled over each blistered surface, and next morning the left hand could be extended, and the right was stronger. This treatment was repeated several days, and the patient eventually recovered the former strength of his arms. On one occasion, a grain having been applied on each arm, contractions and vermicular movements of the muscles of the hand were

immediately induced, and afterwards heat, sweating, general succussions, and formication.

CASE II.—A red-lead manufacturer, who had been eighteen times cured of the lead colic at the hospital of La Charité, was attacked with a palsy of the extensors of the hands, during convalescence from his last attack of colic; and, after taking a few pills of strychnia, was dismissed as incurable. The whole movements of both hands, but particularly of the right hand, were sluggish and limited; but the extensors of the fingers and hands were quite powerless. A blister being applied to the outside of each forearm, half a grain of strychnia was sprinkled on the exposed surface of one. In an hour he felt a strong sensation of heat of skin and dragging in the muscles of the hand, and next morning he could extend the fingers a little. The treatment was then intermitted for a few days, on account of the recurrence of an habitual giddiness; but, on being resumed, a grain of the strychnia was applied on the blistered parts, and in an hour slight succussions took place in both arms, and indeed throughout the whole body. Next day the fingers of the right hand could be freely extended, and those of the left could be raised considerably. On the day after that, the powder was applied to the right arm, and caused contractions in that arm only. After another intermission, on account of a return of the vertigo, the treatment was again resumed, and for several days two grains were daily applied to an open blister on the nape of the neck. The hands, in consequence, were gradually and progressively restored to their natural state.

URINARY ABSCESS.

Case of Urinary Abscess in the Perineum, treated at St. GEORGE'S HOSPITAL.

ADAM DAVIS, æt. fifty-eight, admitted January 27th. He has had stricture for many years, and several surgeons have endeavoured, without success, to pass an instrument into the bladder. A month ago a swelling began to form in the perineum, near the anus, which has gradually increased, but latterly with more rapidity. It at present distends the whole perineum, and extends on the left side to the front of the abdomen, the scrotum and penis being also considerably swollen. In the perineum, fluctuation is easily perceptible, while the scrotum and abdominal boundary of the abscess are hard and tense. He can make water tolerably well, but some usually dribbles away for some time afterwards. He has much constitutional disturbance, with a quick irritable pulse, and anxiety of countenance.

Mr. HAWKINS, who had called at the hospital to see another patient, made a free incision in the left side of the perineum, which gave exit to full three-quarters of a pint of urine and pus,

with some shreds of sloughy cellular membrane. Some scarifications were also made, to relieve the tension of skin around the abscess. The fingers could be passed freely into an irregular cavity, which was crossed by portions of cellular membrane, which appeared to be in a sloughy state.—*R. Haust. Salin. Ammon. c. Tr. Opii ℥ v. sextis horis.* Linseed poultice and fomentation to the wound.

28th.—Very greatly relieved. Tongue moist and clean; pulse much less frequent. Some urine comes by the wound, but the greater part passes through the urethra. The swelling of the scrotum and sides of the nates and perineum is much diminished.

Mr. Hawkins remarked the great difference between a case of the present kind and one of extravasation of urine; a very successful instance of which had recently occurred, under the care of Mr. KEATE, the cause being the same in each, viz. irritation, and generally ulceration of the urethra behind the stricture: in the one there being a sudden rupture of the urethra, with a forcible propulsion of a large quantity of urine into the cellular membrane, which, being in a healthy state, is easily lacerated, and allows the urine to pass upwards so as to distend the scrotum and penis, and abdominal parietes: in the other a small quantity of urine only escaping from the urethra, or a small abscess taking place at the side of the urethra, and not containing urine until ulceration had produced a communication with the urethra, and the extension of the abscess being preceded by deposition of lymph into the surrounding textures, so as to form a boundary to the abscess. In the one the infiltration of urine being followed by the most severe constitutional disturbance, with extensive sloughing of the cellular membrane and skin, and by death in a short space of time, unless numerous and extensive incisions are made very early, to afford exit for the sloughs and for the urine: in the other case, the disease proceeding much more slowly, (in the present instance a whole month,) and only so far different from a common abscess as it contains urine mixed with the pus, and requires therefore a free incision low in the perineum, to allow the water to be discharged freely.

29th.—The interior of the abscess is granulating, and the swelling much lessened. Pulse 100, quiet, and rather weak.—*R. Haust. Cinch. Ammon. Carb. gr. iij.; Tr. Opii ℥ v. M. fiat haust ter die sumend.*

31st.—The bark having produced diarrhoea, and in consequence of this an increase of his debility, the quantity of laudanum was increased to $\mathfrak{m}\text{x}$. in each dose, and he was ordered a pint of porter daily. An instrument being passed into the urethra, a hard cartilaginous stricture was found, which commenced about four inches down the canal.

February 13th.—The abscess has now nearly closed, except at the wound itself, which is contracting quickly. Much less water

passes through the wound, and his health is much improved. A small catgut bougie is passed every other day, which is admitted to a greater depth than could at first be done.

WOUND OF THE THROAT.

Wound of the Throat; Disease of the Larynx.

(ST. GEORGE'S HOSPITAL.)

WM. GRENYON, æt. forty-six, admitted January 27th, under the care of Mr. HAWKINS, having in despondency inflicted a deep wound on the left side of the neck, from below the ear towards the front of the chin, the line of the wound being some way above the os hyoides. There had been hemorrhage, according to report, to the amount of a quart, and on his admission he was very faint from loss of blood.

He remained perfectly composed and free from fever till Feb. 5th, having only complained of a little cough, which commenced on the 31st. The wound at this time was granulating, and perfectly healthy.

Feb. 5th.—He was seized with great difficulty of breathing and swallowing, totally lost his voice, had expectoration of large quantities of thick tenacious mucus; his pulse became extremely rapid, but small and weak; his countenance had an expression of intense anxiety, and the larynx was tumid and tender. He had all the symptoms, in short, of acute laryngitis, in a debilitated constitution.

Twelve leeches were immediately applied to the larynx, which was afterwards fomented, and he was directed to inhale the steam of warm water constantly; and he took five grains of calomel and one and a half grain of opium directly.

Under this treatment the symptoms soon subsided, so that the next day (Feb. 6th,) his pulse was only 102, and perfectly quiet; and all difficulty of breathing had gone, though he was still unable to swallow with facility.—Ordered to continue the medicine he had previously taken; saline mixture with paregoric; and to take some syrup for his cough.

9th.—He had a return of laryngitis in a slighter degree, which was again relieved by twelve leeches, and a repetition of the same medicine.

11th.—Not much difficulty in breathing or swallowing, but some cough is always produced by deglutition, though not to the same degree as a few days since. He makes no complaint, except of the cough. There is no pain or tenderness of the throat, nor is there any pain in the chest; and he can inspire deeply and freely without any irritation of the lungs: yet within the last three days he has become evidently much worse. His countenance is sallow, the features shrunk, with an expression of great anxiety; his breathing is hurried, and with a rattling noise from the expectoration, which is very copious, and has a small quantity of pus mixed

with the mucus. His pulse is above 120, irritable and weak; tongue clean, and generally moist. It was evident that he was sinking, and, as Mr. Hawkins judged, from irritation spreading downwards from the larynx, and probably producing effusion into the lungs; for the small quantity of purulent secretion and the absence of pain did not lead him to expect phthisis, though the patient said he had been subject to a cough before his admission.

14th.—Some slight tumefaction was observed just above the sternum, which led Mr. Hawkins to suspect that an abscess might have formed; and, on pressing deeply on the right side of the trachea, it appeared as if some fluid could be made to project by the side of the left sterno-cleido-mastoideus muscle, but too indistinct for any one present to decide that this was the case. There was not the slightest pain or tenderness on pressure, nor did pressing this part produce any difficulty of breathing; and the trachea could easily be felt below the integuments; so that it was evident, if matter did exist, that it did not produce pressure on the trachea. Even this slight swelling was less distinct when the throat was examined the next day, during which he sunk gradually, and died in the afternoon.

Dissection.—A considerable swelling was now perceptible in the fore part of the throat, in which the fluctuation of fluid was very evident; and, on dissection, several ounces of thick pus were found in front of the larynx and trachea, reaching from the os hyoides to the sternum, behind which the matter was in contact with the deep cervical fascia. The surface of the thyroid and cricoid cartilage, and of the trachea, was quite exposed, the covering of the abscess being formed anteriorly by all the muscles below the os hyoides except the crico thyroideus, which remained at the bottom of the abscess. By the contraction of those muscles the abscess had been made to extend itself principally by the side of the trachea, under the sterno-cleido-mastoidei muscles, and below the sternum towards the chest; and had thus been prevented from projecting in front of the trachea during life. The parts between the bottom of the wound and the commencement of the abscess were perfectly sound.

On opening the larynx, the soft parts between the epiglottis and the superior thyro-arytænoid ligament, on each side, were very much thickened by the deposition of lymph beneath the mucous membrane; and a small ulcer was found at the mouth of the epiglottis. Just above this ligament, on the right side, a small opening led into a cavity completely surrounding the arytænoid cartilage, portions of which had exfoliated and were loose in the cavity; and nearly the whole of the cartilage was laid bare, the joint alone being healthy. The greater part of all the cartilages were converted into bone. The inner membrane of all the air tubes was highly turgid with vessels; and both lungs contained more mucus than usual, especially the right, the lower part of which was condensed and heavy, from the quantity which had

been secreted; and a few flakes of recent lymph were on the surface of the pleura. The other viscera were healthy.

The disease in the larynx must, no doubt, have existed for some time before he inflicted the wound in the throat, as ossification and exfoliation are comparatively slow processes; but the coincidence with a wound in the neighbourhood is curious, and contributed to produce the obscurity in the progress of the symptoms. The wound may, perhaps, have accelerated the disease, though it was not likely to be the immediate cause of the abscess, from the healthy state of the granulations and the gradual filling up of the incision. The abscess being directly in contact with the membrane of the larynx and trachea, and the pus being in equal quantity on both sides of the larynx, (or, if any thing, more copious on the right side,) were sufficient, in Mr. Hawkins's opinion, to show that it had been the consequence of the inflammatory condition of the inner membrane of the tube, and the irritation of the internal abscess round the right arytenoid cartilage, from which the purulent expectoration had proceeded during life.

AXILLARY ANEURISM.

Case of Axillary Aneurism, at the PHILADELPHIA ALMSHOUSE.

By Professor GIBSON.

THIS is a highly interesting and instructive case. The patient, a stout, muscular, athletic man, about six feet high, applied to Professor GIBSON on account of a luxation of the left os humeri at the shoulder-joint, of nine weeks' standing. He was admitted into the Almshouse Infirmary on the 6th of March: the antiphlogistic system was pursued until the 15th, when attempts at reduction were made, in the presence of the surgeons and students of the house, which was not accomplished until after the lapse of an hour and three-quarters from the commencement of the operation.

On the 16th, there was a general swelling over the deltoid and pectoral muscles, with a distinct pulsation of an aneurismal character.

On the morning of the 17th it had increased considerably, and in consultation "it was decided that the subclavian artery should be tied without delay." This was accordingly done by Professor Gibson.

A note is here appended, descriptive of an instrument invented at his suggestion, for passing a ligature around deep-seated arteries, to which we can bear testimony as being probably the best that has yet been devised for that purpose. "It consists of a silver canula, fixed on a wooden handle, surrounded (near the part where the canula joins the handle) with a collar, through which a steel stilet, made of a narrow watchspring, the length of the instrument, passes, and immediately afterwards enters an opening just below the collar, in order to traverse the whole cavity of the canula, and emerge at its point. This extremity of the stilet is

covered with a flattened silver cap moderately blunt; whilst its other, or upper extremity, passing upwards from the collar above mentioned, lays parallel with the handle, and has an eye near its end for holding a ligature. A small screw, for the purpose of fixing the stilet while the surgeon is in the act of passing the instrument beneath the artery, works through the silver collar, and may be used or not, as the surgeon pleases."

Our readers will hardly consider it necessary for us to enter into the minute details of the progress of the case, which are carefully recorded. We shall briefly state, therefore, that the patient died at four o'clock P.M. on the 25th, the tenth day after the ligature of the subclavian.

The account of this case concludes with the dissection, which was conducted by Dr. ASHMEAD, (the parts having been previously injected,) and the report drawn up by Dr. HALL, in the presence of a large number of physicians and students. It is so highly interesting, and important for a full understanding of the case, that we conceive it matter of justice to Dr. Gibson, and requiring no apology to give it entire.

"Philadelphia Almshouse; March 24th, 1828.

"Dissection of John Langton, sixteen hours after death.—The left hand and forearm exhibited marks of incipient gangrene, extending only to the skin and subjacent cellular membrane, and terminated by a well-defined line at the elbow. The wound made by the operation was filled with an offensive sanies, and exhibited no tendency to healthy granulations.

"We threw in the cold lead injection, by fixing a pipe in the mouth of the left subclavian, through the aorta: the shoulder and neck were minutely injected, but, as the radial artery was not filled, the pipe was introduced into it, and the lead driven upwards until a portion of the first injection was made to recede through the divided thoracic vessels.

"The arm, scapula, and clavicle, with a portion of the ribs, were separated from the body, and carefully dissected by Dr. Ashmead and myself, in the presence of the surgeons and house students. All the parts about the axilla were so blended by adhesions as to render their discrimination very difficult. The muscles were unaltered, except from extravasation and effusion to be hereafter described. The subclavian artery was healthy, the vertebral of its usual caliber; the internal mammary large; the inferior thyroideal, the posterior cervical, and the superior scapular, arose by a common trunk from the subclavian, together with an anomalous artery, about the size of a crowquill, which descended between the subclavian and carotid, along the trachea; its destination was not pursued. The posterior cervical was of the size of a large quill, having its branch to the base of the scapula much enlarged. The superior scapular artery ran along the upper edge of the subclavius muscle, and had escaped the operator's knife, though it

had been made visible by the incisions. It inosculated beneath the neck of the scapula with the inferior dorsalis scapulæ, which was of the size of a crowquill. From the unfavorable state of the part for dissection, we could not demonstrate the channels through which the blood to the arm passed; but that these existed, and would, under auspicious circumstances, have become adequate to the circulation, the course of the injection and other circumstances fully prove.

"As the injection from above had penetrated to the ligature, it is presumed that no coagulum had as yet formed. The ligature embraced the artery just where it emerges from beneath the scale-nus anticus, and included no other part. The artery was uninjured in all the space between the ligature and the point where it became adherent to the head of the bone, at the internal margin of the lesser tubercle. It was firmly attached to the substance of the bone and the articular capsule by dense cellular or ligamentous substance; *and such was the compactness of this juncture, and so short the portion of artery between this point and that of its attachment to the rib, that it seemed absolutely impossible to reduce the bone to its place and not cause the rupture of the vessel.* This effect was here exhibited. Where the artery adhered to the bone, its internal coats had been ruptured, with the exception of a very narrow band immediately opposite to its point of attachment. The extremities of the artery had separated, as far as the band above alluded to would allow, (which was about half an inch,) and the artery, by tending to straighten itself, was only retained to the bone by the intervening portion of its external coat. The dilatation of the external coat had formed a sac, which was expanded by being stretched between the points of its attachment to the bone and the ruptured extremity of the artery. This true aneurismal sac extended beneath the artery towards the ligature, and beneath the pectoralis minor muscle, but was ruptured in its posterior portion, very near its adhesion to the bone, so as to have allowed the blood to escape and form a diffused aneurism. The blood had penetrated beneath the pectoralis major and minor muscles, and along the edge of the latissimus dorsi as far as the seventh rib. It had extended beneath the humerus to the space between the long head of the triceps and the teres minor, and had filled the axillary cavity, but had been prevented from extending downwards by the general agglutination of the parts, caused by the dislocation. Along the internal margin of the coraco brachialis and the deltoid, there was much extravasation; but we rather think it was caused by the means used to reduce the bone.

"The walls of the true aneurismal sac were of so compact a texture, and its boundaries so well defined, that the conjecture of its having existed previously to the reduction of the bone, and that its rupture was a distant and subsequent event, is rendered probable.

"Upon exposing the articular cavity, the head of the bone was

found to rest beneath its original socket upon a bed of dense ligamentous substance. The capsule was much thickened, and had a rupture in its inferior anterior portion, through which the blood and injecting matter had entered.

"About one third of the lower portion of the glenoid cavity had been broken off, and remained attached to the superior part of the neck of the bone, by an adventitious adhesion.

"The greater tubercle of the humerus was cracked through its base, with the exception of the portion beneath its anterior facet. From the thickening of the periosteum, and the deposit of osseous matter, we do not think that this fracture was recent. The extremity of the acromion process was found fractured, but was still firmly embraced by the surrounding muscular and fibrous structure.

"It is proper to mention that the left ventricle of the heart was enlarged, and its muscular substance unusually soft. The right ventricle and auricles did not exhibit these phenomena. Upon opening that part of the subclavian embraced by the ligature, the internal coats of the vessel were found completely divided, but no traces of a coagulum could be observed above the ligature; nor was there any vestige of coagulable lymph, or any approach to adhesion, though the ligature held its place with great tenacity, and the parts embraced by it seemed healthy.

"No other part was examined.

— "JAMES C. HALL, M.D."

Some remarks, growing out of the unfortunate results of this, which is the second case of the kind that has occurred to Professor Gibson, and the only two cases that have been reported in this country, follow. Allusion is first made to those who have advised, and successfully executed, the reduction of old luxations of the humerus. There can be no doubt of the fact that the practice is warranted by experience; and, for ourselves, we should not hesitate a moment to undertake it, if a fair case were presented to our notice. The cases of Foubert, (as well as several others,) which were alluded to in our last Number, page 451, are next adduced, to show that the same results have followed similar attempts by other surgeons; and from these Dr. G. has drawn some valuable practical inferences, to which we shall call attention at the conclusion of this article.

"It is not my intention," says Dr. G. "to comment, except in a very brief way, upon the case of Langton. The particulars of it having been fairly and honestly stated, the profession will be able to draw its own conclusions. I may remark, however, that between the first accident of the kind I have detailed and the second, (a period of five years,) I have reduced five luxations, each from two to four months' standing: one a patient of Dr. D. T. COXE, upwards of sixty years old; another of Dr. MANUEL E. ROBINSON, about the same age; and three more in my own practice; besides

several similar accidents of a recent kind, all of which terminated in the happiest manner.

"From these, and from many other cases of a similar character which I have treated within the last eighteen years, I think I have good reason to conclude that, where no adhesion exists between the artery and surrounding parts, the operation may be done with safety: that, on the contrary, when adhesion does exist, (and of this we have no means to judge,) rupture of the vessel must be an inevitable consequence, whether the reduction be effected by force or by the most gentle means. To show, however, that neither my colleagues nor myself made use of unwarrantable force in the case of Langton, I shall present the following documents, obligingly furnished by some of the gentlemen present at the reduction."

The concluding observations of Dr. G. respecting the reduction of old luxations, are practically valuable, and we shall conclude by submitting them to our readers.

"If the patient is young, not very muscular, the luxation not complicated with fracture; if no attempts have previously been made to accomplish the reduction, and the head of the bone has not been out of its natural situation beyond five or six weeks, I should advise the attempt to replace it. But, on the contrary, if the patient is very robust and vigorous, advanced in years, accustomed to labour and to the free use of ardent spirits, and the head of the bone has been long out, I should discountenance any attempt at reduction."—*American Medical Recorder*.

AFFECTIONS OF THE CHEST.

Cases of Affections of the Chest, succeeding Operations and Injuries, treated at the GLASGOW ROYAL INFIRMARY.

CASE I.—David M'Lardy, æt. twenty-one, was admitted December 29th, with a small fistula on right side of anus, discharging a little thin matter, but not communicating with the gut. It commenced four years ago, and was supposed to be nearly healed, when, five months since, the discharge was renewed, without any pain. The fistula was cut in the usual way on the 4th of January. On the 6th, he complained of griping pains. On the 7th, he had a rigor, followed by severe pain of the back, extending to the testicles. He was feverish and uneasy; pulse ninety; tongue whitish; thirst; urine high coloured. His bowels had been opened by castor oil, and a poultice was applied to the wound.

On the morning of the 10th, the feverish symptoms continuing, he was bled to sixteen ounces. Blood buffy. Complains chiefly of pain in testicles; edges of the wound feel hard; pulse ninety-six; bowels open. In the evening, had six grains of calomel, with one of opium, and the hip bath; which was followed by profuse perspiration and great relief from pain.

* The documents referred to confirm the statements of Dr. G.—EDITORS.

December 11th.—Complains chiefly of weakness; pulse eighty; thirst.—Pulv. Doveri gr. xij. vespere.

13th.—Had sickness and vomiting last night. Hip bath this morning, which produced copious perspiration. A slight rigor during the forenoon; pain of back and testicles; lower part of abdomen slightly tympanitic, but not painful; bowels rather slow; pulse ninety-four; tongue cleaner.—Had twelve leeches to abdomen, and a purging enema.

On the 18th, an abscess which had formed on left hip was punctured, and four ounces of matter evacuated. A healthy purulent discharge from the hip continued, but the feverish symptoms did not abate; and on the 21st another abscess, near the former, containing half an ounce of pus, was opened. During the night he had some delirium, and next day complained of pain of abdomen, which was much distended and tympanitic. Countenance sunk; pulse 120. Symptoms continued with little change till the 25th, when he had frequent cough, with expectoration containing some blood. On examination by the stethoscope, the right lung was found to be consolidated. Had a blister to the breast, and the Vinum Antimon. He sunk without any aggravation of symptoms, and died on the 28th.

Dissection.—The abscesses on the hip much contracted, and contained no pus. The colon was greatly distended with air, but the texture of that, and of all the other abdominal viscera, seemed free from disease. The right lung was found adhering extensively to the sides of the thorax, and nearly the whole of this lung was changed in structure: it was mostly in a state of hepatization, but in some parts was beginning to pass into that of purulent infiltration. The left lung was perfectly healthy.

This case is an interesting example of the insidious manner in which affections of the chest frequently succeed operations. Until three days before death, no suspicion appears to have been entertained of any pulmonary disease: all the symptoms pointed to the abdomen and pelvis. When the formation of abscesses over the hip did not remove the fever, it might reasonably be concluded that some mischief was going on in the cavity of the abdomen: probably the formation of matter within the pelvis. Slight cough and puro-mucous expectoration were the first and only symptoms of chest affection. Previously he had been repeatedly questioned as to whether he had cough, or any uneasiness about the breast, but he always affirmed he had not; and it was, we presume, owing to the absence of all symptoms denoting an affection of the lungs that a more rigid examination was not earlier had recourse to. The knowledge at length obtained by means of the stethoscope, if it ever could have availed to save his life, came too late to be of any service.

CASE II.—Helen Blackie, æt. forty, was admitted on the 2d of January. The day before she had fallen down several steps of a

stone stair, and had received a wound of the scalp, extending from near the lambdoidal suture two and a half inches forwards, and then transversely across right side of the head for about five inches. The edges of the wound had been brought together by stitches, and a considerable part had adhered; but in one or two points the probe passed several inches backwards and forwards, and a considerable quantity of thin fetid pus was discharged. She had received, at the same time, an injury on the left side of the chest, which through its whole extent was emphysematous, but no fractured ribs were detected. Much pain was felt, and increased on deep inspiration, at lower anterior part of chest. Had difficulty of breathing, headach, and tinnitus aurium, with dulness of hearing; thirst; skin hot; tongue white; bowels costive; pulse 100. Profuse suppuration and disunion of the wound followed; and in a few days after admission the pericranium was found destroyed to some extent. The patient became weak, and was allowed a small quantity of wine; after which she began to recruit, and the suppuration rapidly diminished. The emphysema, dyspnoea, and pain of chest, disappeared after wearing the thorax bandage. She had slight, but not troublesome cough.

She went on favorably until the 29th, when she became uneasy and fretful, was averse to being disturbed, and her deafness increased. She was feverish, and her pulse had risen to ninety-six; but she complained only of weakness. The wine was omitted, and she was ordered a purge.

On the 30th, her bowels were freely opened, and the pulse had sunk to seventy-six: she still, however, seemed uneasy, but made no positive complaint.

On the 2d of February the report is, discharge from scalp increasing and thin; has cough, with expectoration and slight dyspnoea; pulse 100; tongue moist; bowels open.—R. Submur. Hydrarg. gr. vi.; Pulv. Antim. ℥i.; Pulv. Opii gr. v. M. div. in vi. l ter indies.

On the 3d, features were shrunk, and she seemed fast sinking. Pupils contracted. Complained of no pain, and cough was less troublesome; pulse 100. She died on the morning of the 4th.

Dissection.—A considerable part of wound of scalp remained disunited. A portion of bone, about three inches square, was denuded of its pericranium. The corresponding part of the inner table was rough, and of a more yellow colour than natural. Beneath it the dura mater was slightly thickened, vascular, and covered with pus. A small abscess had formed in cerebral substance, at superior part of the right middle lobe of the brain: it contained greenish yellow pus. The brain was firm, and its blood-vessels distended. A very small quantity of fluid was found in the ventricles. In the left side of the thorax several ounces of sero-purulent fluid were found: the lung was covered with coagulable lymph, a third of it was in a state approaching to hepatization, and several small portions of its substance were indurated.

These portions varied in size from a small hazel nut to a walnut, and were seated immediately under the pleura. Over two or three of them this membrane was of a dirty yellow colour, and, when they were cut into, pus oozed freely from the cut surface: from most of the others purulent matter could be pressed. In the opposite lung were four or five points of a similar nature.

HERNIA.

Strangulated Umbilical Hernia. Cessation of Vomiting for eight Days. Operation performed fifteen Days after the occurrence of the first Symptoms of Strangulation. Fatal Result. (HÔTEL DIEU.)

A WOMAN, sixty-two years of age, the mother of six children, had had for fifteen years an umbilical hernia, about the size of a goose's egg. She had always worn a bandage, which had not, however, been properly applied. The rupture had never been entirely reduced. The patient had been subject to attacks of colic, but never to vomiting. She was admitted January 29th, 1829. Fifteen days before she had suffered from colic, shiverings, hiccup, nausea, and vomiting, at first of mucous and alimentary, and afterwards of bilious and fecal matter. The symptoms ceased on the 24th, but she had no evacuation from the bowels.

The day after her admission into the hospital, the tumor was tense, painful to the touch, of considerable size, being four inches in diameter. It surrounded the navel. The pulse was strong, face flushed. The patient replied to any questions that were put to her with hesitation, but still in a rational manner. No colic nor vomiting; no evacuation from the bowels. M. DUPUYTREN did not think himself called upon to operate, because there was no other symptom of strangulation than the constipated state of the bowels.* He ordered fifteen leeches to be applied to the tumor, and afterwards emollient cataplasms; warm bath; a purgative clyster; veal broth.

31st.—Patient extremely weak. Tumor in the same state. Pulse quick and feeble; countenance much changed. Has not vomited. Has discharged flatus freely from the bowels, but no feces.—V.S. from the arm.

In the afternoon, she was attacked with hiccup, nausea, and vomiting of stercoraceous matter, and colic. Erysipelatous inflammation of the hypogastric region.

M. SANSON operated three hours afterwards. He made a long longitudinal incision, and laid bare the sac, which was much thickened, particularly at its lower part. It contained a portion of intestine about four inches long, which appeared to be a part of

* Were the tension and painful condition of the tumor not symptoms of strangulation? We are almost inclined to believe that the opinion of M. Dupuytren must have been mistaken, and consequently misstated.—EDITORS.

the transverse arch of the colon. There were numerous adhesions between the parts, and it was thought there was a portion of omentum at the bottom of the wound. The strangulated parts were relieved by an incision upwards and towards the left side. The intestine, which was of a deep red colour, was reduced. In three-quarters of an hour the patient again vomited fecal matter. Clysters were administered, and five or six evacuations from the bowels followed.

February 1st.—Twenty leeches were applied to the hypogastric region, over the part affected with erysipelas. Countenance of the patient much altered; pulse thready. She could scarcely articulate. Died in the night.

Dissection, thirty hours after death.—Abdomen: The convolutions of the intestines were of a deep red colour, and were surrounded by purulent matter; flakes of false membrane were observed upon their surface. The parts constituting the hernia had escaped from the abdominal cavity through a separation of the linea alba, above the umbilicus. The portion of intestine which had been reduced was a part of the arch of the colon. A part of the omentum was still in the opening, and adhered strongly to the edges of it.

Observations, (by the relater of the case, in the Journal Hebdomadaire.)—This case is very curious, inasmuch as the principal symptoms of strangulation did not reappear for eight days after they had ceased at first. The woman vomited fecal matter from the 16th to the 24th of January: vomiting then ceased, and did not return till eight days after. M. Dupuytren remarked that it was the first case of the kind he had observed. He had known the vomiting cease for two or three days, but never for so long a period as in this instance, while a portion of the intestine was still strangulated.

This case appears to us “très curieuse,” for other reasons than those assigned by the relater of it. Surely the symptoms did demand, and urgently too, the immediate performance of the operation the day after the patient was admitted into the hospital. M. Dupuytren, it seems, entertained a contrary opinion; but the reasons for which he is said to have decided upon deferring the operation seem to us so decidedly erroneous, and so completely contradicted by the condition of the patient at the moment, that we must suspect the report of the case upon this point to be inaccurate.—EDITORS.

CRITICAL ANALYSES.

*Quæ laudanda forent, et quæ culpanda, vicissim
illa, prius, cretâ; mox hæc, carbone, notamus.*—PERSIUS.

Illustrations of the Diseases of the Breast. By Sir ASTLEY COOPER, Bart. F.R.S. Serjeant Surgeon to His Majesty; Consulting Surgeon of Guy's Hospital; Lecturer on Anatomy and Surgery, &c. In two Parts. Part I.—4to. pp. 89; with nine beautifully coloured Plates, including numerous Figures.—Longman and Co. Feb. 1829.

IF we were to scrutinize the motives which lead to the publication of the great majority of books, we should probably conclude that the diligence of men is generally to be estimated by their eagerness for immediate reward, or their ambition of future fame. The continued industry of Sir ASTLEY COOPER cannot be prompted by either of these motives. Of present reward he is independent; and, of future fame, so perfectly secure, that he might safely repose upon the high reputation he has established. His zeal must now be attributed to the honourable and philanthropic desire of benefiting the public, by communicating to his surgical brethren the results of his long and extensive experience.

The importance of the subject to which our attention is directed in this work, will not be denied. These *Illustrations of the Diseases of the Breast* are divided into two parts: those which are, and those which are not malignant. In this part the author has confined himself to the description of the latter, distinguishing those which do not arise from a vitiated state of the system, nor produce any dangerous constitutional effects, and do not contaminate the parts in their neighbourhood; nor affect those at a distance from their original seat. It is observed, however, that some of these swellings, when they have existed long in a dormant state, will have alterations produced in them by changes of the constitution, by which their extirpation may be rendered necessary; for malignancy may be lighted up in them by constitutional disease, by anxiety of mind, and by the cessation of the menstrual secretion. The female breast is liable to almost all the complaints of other structures, and to some which are peculiarly its own.

“The uninformed surgeon is too apt to fall in with the opinion of the vulgar, and to confound all the swellings of the breast under the general term of Cancer; and yet every surgeon who has fully

investigated the character of these swellings, by examination of the diseased parts after operation, must be aware of the great variety which prevails in their nature and appearances, and is therefore led to the conclusion that, far from their being all of one family, a great number of genera of tumors actually exist. He will soon learn that some are the effect of acute inflammation; that others are of a simple chronic kind; that some are chronic accompanied with specific action; and that others are specific and malignant. It is, therefore, the surgeon's duty to discriminate these differences in the living body; and this he can only accomplish by a very careful and nice manipular examination of the complaint, by having repeatedly inspected the parts which have been removed in operations, by examining those which have been met with in the body after death, and by an accurate and minute history of the case. The experience arising from these different sources gives him the power of accurately judging of the nature of the disease when it is presented to his attention in the living body." (P. 2.)

Sir Astley divides the diseases of the breast into three classes: first, those which are the result of common inflammation, whether it be acute or chronic; secondly, into complaints which arise from peculiar or specific action, but which are not malignant, and do not contaminate other structures; thirdly, into those which are not only founded on local, malignant, and specific actions, but which are connected with a peculiar and unhealthy state of the constitution. By a malignant complaint is implied a local diseased action, which not only affects the parts in which it is originally situated, but which contaminates those in its neighbourhood. It is produced by a morbid state of the constitution, and is frequently accompanied by similar disease in other, and even remote, parts of the body.

The following extract describes the purport of the work, and at the same time may convey a useful lesson to the presumptuous many who conceive their decision to be infallible.

"It will be my object in the following pages, with the aid of engravings, to detail the symptoms, describe the external characters, and exhibit the internal appearances of each of these diseases, so far as I have been able to observe and examine them; and, in doing this, I shall endeavour to point out their discriminating marks, so as to enable the surgeon to distinguish them in the living body. I am fully aware of the difficulty of the task, and am ready to acknowledge that I have been often mistaken in my diagnosis; but if such errors of judgment occur to one who has had a considerable share of practice and experience, and trusts he has not been an idle or inattentive spectator of what has been presented to his observation, how often must those be liable to error

who do not industriously investigate the nature of disease by dissection, and compare it with its external characters in the living body?" (P. 5.)

Chapter ii. "*On the Effects of common Inflammation in the Breast.*"—Acute inflammation in the breast differs little from the same inflammation in other parts of the body, excepting in the severity of suffering which it produces. It is adhesive in the first stage, suppurative in the second, and ulcerative in the third. It occurs most frequently in women at an early period after delivery, in consequence of the abundant determination of blood to the breasts for the secretion of milk. In the first stage, cold evaporating lotions and purgatives are to be employed: "but if the patient suffer from the cold produced by the evaporation of the spirit, a simple tepid poultice may be substituted for it, occasionally applying leeches to the swelling; still recollecting that the chief dependence is upon purging." If suppuration is not prevented by these means, warm poppy fomentations and poultices are to be employed. The late Dr. JOHN CLARKE objected to the use of warm applications in such cases, and, as his opinions have had much influence upon the practice generally adopted, we shall state his views, together with the result of our own observation. He contended that poultices and fomentations "derived a large quantity of blood to the parts, and that, by their relaxant power, they weakened the tone and strength of the parts to such a degree, that if matter should inevitably be formed, (which, when it happens, is generally in a large quantity,) the abscess is always very difficult of healing, especially if a large opening should be artificially made into it."* Instead, therefore, of such applications, Dr. Clarke advised the use of cold saturnine lotions; and he recommends us to continue them without intermission, even "if the breast should suppurate, and that the fluctuation of matter can be distinctly felt under the skin, until the abscess points."† We have tried, in many cases of milk abscess, the treatment advised by Sir Astley Cooper, and the contrary plan which is supported by the authority of Dr. Clarke. In whatever manner these cases may be treated, they will frequently prove tedious and painful: but, judging from our own experience, the objections urged by Dr. Clarke against the use of warm emollient applications

* Practical Essays on the Management of Pregnancy and Labour. By JOHN CLARKE, M.D. Page 42.

† Ibid. page 43.

are more imaginary than real. The continued use of cold lotions is generally very distressing to the patient; while, as Sir Astley observes, poppy fomentations and poultices soothe and relax the part, and, by their narcotic qualities, diminish the sensibility of the nerves.

If much pain exists, opium and saline draughts will also be necessary. It is frequently a question with surgeons whether these abscesses should be opened, or be left to break spontaneously. Upon this subject Sir A. thus states his opinion:

"If the abscess be quick in its progress, if it be placed on the anterior surface of the breast, and if the sufferings which it occasions are not excessively severe, it is best to leave them to their natural course, rather than employ the lancet for the discharge of the matter. But if, on the contrary, the abscess in its commencement be very deeply placed, if its progress be tedious, if the local sufferings be excessively severe, if there be a high degree of irritative fever, and the patient suffer from profuse perspiration and want of rest, much time is saved, and a great diminution of suffering produced, by discharging the matter by the lancet. Still it is wrong to penetrate with the lancet through a thick covering of the abscess, as the opening does not succeed in establishing a free discharge of matter; for the aperture closes by adhesion, the accumulation of matter proceeds, and ulceration will still continue; on this account the opening should be made where the matter is most superficial and the fluctuation is distinct, and it should be in size proportioned to its depth." (P. 10.)

Sometimes several abscesses form in the same breast, quickly succeeding each other, and lead to very protracted suffering. Opium and quinine will here be required. Sinuses are sometimes formed. The best mode of treating these cases Sir Astley has found to be by injecting them with a solution of two or three drops of the strong sulphuric acid to an ounce of rosewater, and to cover the breast with the same solution.

"Now and then a deep-seated abscess forms between the posterior surface of the breast and the ribs, which, when it breaks, leaves a sinus which leads to the ribs. An exfoliation of part of the rib afterwards occurs, occasioning a very protracted suffering; and in these cases, as well as in the former, injecting the diluted acids is the best practice." (P. 11.)

The division of the sinus by the knife is unnecessary. In the former case it will heal by adhesion. In the latter, unless the exfoliating bone be loose, no advantage will be derived from the incision. Sir Astley once saw a lady of delicate constitution, who suffered much from mental anxiety; after her lying-in she had milk abscess, which

broke and discharged freely; and then, instead of healing, the whole breast became excessively swollen, and a truly fungoid excrescence appeared. The patient was soon destroyed by this disease.

Hardness of the breast sometimes remains after abscesses for a considerable time.

"As a morbid action will sometimes, and at a very distant period, arise in the swelling, it is a great object to dissipate it quickly; which will be best effected by the application of the *Emplastrum Ammoniaci cum Hydrargyro*, or by rubbing the part with the Iodine ointment." As a general rule, it is best to continue the child at the breast as long as the mother can bear it.

Soreness of the nipples sometimes prevents women from suckling, and hence distention, inflammation, and abscess of the breast. To prevent these consequences, the breast should be drawn; but the sooner the child can be put to it again, the better. "The best application to the sore nipple is a solution of borax in water, in the proportion of a drachm of borax, three ounces and a half of water, and half an ounce of spirit of wine." Sir Astley also recommends, as a preventive of sore nipples, that women who have been subject to them should wash them, some time before the lying-in, with strong brine.

"*Of chronic Abscesses.*"—From chronic inflammation an abscess is sometimes produced, in which, from the length of time it is forming, from the little pain and the absence of redness and heat in the part, and from the want of rigors and other constitutional symptoms, the formation of matter is not suspected, and the swelling is supposed to be malignant, and to require an operation. In such cases Sir Astley has "seen the operation for removing the swelling begun, and in its progress, the knife having accidentally entered the abscess, the surgeon, by the escape of the matter, having been informed of his error, the operation was suspended; and a poultice being applied, the case ended favorably." For these chronic swellings mercurial alteratives are required, and the *Empl. Ammon. cum Hydrarg.* should be applied to the part.

A swelling is sometimes formed in the breast after a lying-in, which the author terms "the lacteal or lactiferous," because it arises from a large collection of milk in one of the lactiferous tubes.

"Its cause is a chronic inflammation of one of the lactiferous tubes near the nipple, by which its aperture becomes closed, and the tube obliterated to the extent of an inch or more. The patient

applies to the surgeon some time after delivery with a swelling in the breast; unpreceded by the symptoms of abscess, it distinctly fluctuates, and she complains exceedingly of a sense of distention in the part; and, when the child is put to the breast to relieve it, the pain and distention are increased by the draught of milk which enters the breast so soon as the child begins to suck. The swelling is confined to one portion of the breast, from the nipple to the circumference of the organ, and it gives a distinct sense of fluctuation. The cutaneous veins are very large, but the part is otherwise undiscoloured. If a lancet be passed into the swelling, several ounces of milk are discharged; and the milk, being suffered to rest for a few hours, forms a cream upon its surface. If a slight puncture only be made, the milk be discharged, and the opening suffered to immediately close, the accumulation recommences, and in a short time the same appearances and sufferings are renewed.

“When the distention of the swelling is excessive, it sometimes ulcerates, and discharges the milk which it has contained, by a small aperture at a little distance from the nipple; and the opening so produced often continues through the whole period of suckling, the milk being lost, from the aperture not being received into the child’s mouth: and this opening is difficult to heal, until, by weaning the child and by purges, the secretion of milk be entirely checked.

“The treatment which this case requires is as follows: If the mother be prevailed upon to wean her child, as the secretion of milk will soon cease in this obstructed part as in other parts of the breast, a simple puncture will suffice to relieve the distended tube of the milk which it contains. But, if the child still continue at the breast, the opening may be made larger, and the milk be suffered to escape at the artificial aperture whilst the child is sucking: thus imitating the natural relief which the ulcerative process sometimes produces, until the secretion of milk ceases, from the weaning of the child, and from purges to the mother.” (P. 17.)

This disease resembles in its nature the ranula, excepting in the fluid secreted. The one is an obstruction of the submaxillary duct; the other is an obstructed lactiferous tube.

Chap. iii. “*On the Hydatid Disease of the Breast.*”—There are four species of these swellings, three of which are not malignant: one is of a malignant nature. The first species exists in the form of simple bags, which contain a serous fluid. Sir Astley would call them cellulous hydatids.

“The breast gradually swells, and in the beginning is entirely free from pain or tenderness; it becomes hard, and no fluctuation can then be discovered in it; it continues slowly growing for months, and even for years, sometimes acquiring very consider-

able magnitude, the largest I have seen having weighed nine pounds; but in other cases, although the bosom was quite filled with these bags, yet it never exceeded twice the size of the other breast.

"At first the swelling feels entirely solid, so that it bears a great resemblance to a simple chronic enlargement of the breast; but, after a great length of time, a fluctuation can at one part be discovered in it, and then the breast begins to increase more quickly; and in several parts similar fluctuations can be detected. The subcutaneous veins become varicose; but, although the breast is immensely enlarged, it still continues almost entirely free from pain: but to this there are exceptions, for some persons feel an unusual heat, and some, as the breast increases, suffer pain in the part and in the shoulder. The tumor is extremely moveable upon the pectoral muscle, is very pendulous; and in some cases the whole of the mammary gland, in others only a small portion of it, becomes involved in the disease. At length one of the fluctuating portions of the breast slowly inflames, ulcerates, and discharges a large quantity of serum, or of a fluid having its general character, but of a consistence somewhat more glairy; and the sac being emptied, and the external opening closed, if the fluid be entirely discharged, it is a long time before it reaccumulates; and sometimes the sides of the sac adhere, and the cyst ceases to secrete. In other instances I have known the swelling break, and discharge a mucilaginous fluid mixed with serum; and several of the cells in succession, and at distant periods, pass through the ulcerative process, and form sinuses, which are very difficult to heal.

"Excepting during the process of ulceration, the general health remains entirely undisturbed, and the person suffers so little, either locally or constitutionally, that her friends do not discover her malady; and nothing would lead her to consent to an operation for its removal, but the anxiety of mind and the apprehension which the idea of a cancer produces, and the great inconvenience and distress which the weight of a large swelling occasions.

"Although the whole breast should be involved in the disease, and even although the swelling ulcerates, discharges largely, and puts on a formidable appearance, and even becomes of the enormous size which will be seen in Plate the 2d, yet the glands in the axilla remain entirely free from disease; or, if one be slightly enlarged, it is from simple irritation only, and it disappears when the complaint in the breast is removed." (P. 20.)

Although, in the greater number of cases, the whole breast becomes involved in the disease, yet Sir A. has seen it several times affect one part only; and the removal of portions of the breast has been sufficient to prevent a return of the complaint.

Diagnosis.—"This disease, in its first stage, resembles

simple chronic inflammation; but it may be distinguished from it by the absence of tenderness upon pressure, and the perfect health in which the patient remains stamps it to be an entirely local disease." In the second stage, the best criterion is the puncture of the bag, when the evacuation of a clear serum, instead of a purulent fluid, shows the nature of the disease.

Treatment.—No local applications are beneficial. The constitution requires no attention, as the health does not suffer.

"If only one bag is discovered, and that is of considerable size, it sometimes, if punctured, does not again fill, as will be seen in several of the cases. But when the enlargement is excessive, when a multitude of bags are produced, when the weight of the swelling becomes several pounds; when the breast is very pendulous, and drags upon the surrounding parts, and shakes upon every motion; when there is great apprehension, on the part of the patient, of some malignant disease, then the surgeon will be wise in removing it.

"The operation itself is a simple piece of dissection, in which it is the best plan to secure each divided vessel in immediate succession, to prevent any great loss of blood; but it must be confessed that this is not absolutely necessary, as the operation does not require much time in its performance, and the vessels can be compressed by an assistant whilst the surgeon is removing the tumor; or, if he prefer it, each vessel may be secured in a ligature as the operation proceeds.

"When the tumor requires removal for this disease, it is necessary to take away all the hardened and swollen parts of the breast, for they have cysts or cells formed in them; and, if any cyst be suffered to remain, it will still continue to grow, and the remaining part of the breast to form an hydatid tumor.

"The great solace to the patient in this disease is, that, as it does not contaminate other structures, there is no danger of its extending by absorption, of its producing any complaint beyond the breast, or of its affecting other parts of the body; nor have I seen it seated in both breasts at the same time." (P. 25.)

Sir Astley relates twelve very instructive cases of these hydatid tumors in the breast. In one, cellulous hydatids were united with a schirrous tubercle, and the lady fell a victim to the disease.—In the first case, the patient was taken into the operating theatre for the purpose of having the tumor removed, but, upon examining it with great attention, Sir A. felt a fluctuation. A lancet was introduced to ascertain the nature of the contents. Serum only was discharged. A small piece of lint was introduced into the orifice; adhesive inflammation was brought on; the sides

of the cyst adhered, and the patient did well, having no return of the complaint. —In the second case there was distinct fluctuation, surrounded by a wall of hardness. A quantity of serum was discharged by an opening made with a lancet; adhesive plaster was applied, and the wound healed without further application.

The second species of hydatid disease in the breast is of a very curious nature. Its peculiar appearances can scarcely be conveyed by verbal description. Sir A. gives a plate of it, taken from a tumor in the breast of Mrs. King.

“The breast was in this case enlarged, and in the greater part hardened by the effusion of fibrine (coagulable lymph) in lobes into the cellular tissue; but in several parts it contained bags of serum, and formed fluctuating cysts of various sizes. In each of these cells there hung a cluster of swellings, like polypi, supported by a small stalk; and the little pendulous projections appeared to float in the fluid which had been produced around them in the different cysts. Many hydatids were found in a detached state, both in the fluid within the bags and in the solid effusion in the breast; and, taking the whole tumor, vast numbers of them had been formed in it. Their size varied, but the largest did not much exceed that of a barleycorn, the figure of which they assumed. In general they were of an oval form, or I ought to say oviform, as they were larger at one end than the other.

“When opened, they were found to be composed of numerous lamellæ, like the crystalline humor of the eye, or like the layers in the onion, which could be readily peeled from each other. When removed from the breast they had a pearly appearance, and the laminated character of pearl internally.

“The cyst in which they were contained was a perfect bag, and it was composed internally of a membrane which was highly vascular, like other secreting surfaces; and the solid part surrounding the cyst had a greater number of vessels near the bag than at a remote distance from it; but the whole of the diseased structure was endowed with great vascularity.” (P. 41.)

“In its external character this species resembles the first which has been described. The absence of tenderness being the same in both, it will thus be distinguished from the simple chronic disease of the breast. It cannot be discriminated from the former hydatid disease but by dissection.

“From the scirrhus tubercle it is known by the hardness, by the occasional severe pain, and by the broken health which usually attends that disease; for, although in the case from which I have given the description of this complaint the tumor weighed thirteen pounds upon its removal, yet the general health was good, the absorbent glands in the axilla were unaffected, and there was

no local disease in any part of the body. It may be also observed, that scirrhus tumors very rarely acquire so great a magnitude as the hydatid swelling here produced." (P. 43.)

Extirpation is the only mode of relief; neither constitutional remedies nor local applications are of any service.

The third species of hydatid which is found in the breast is the animal or globular. It consists of a bag containing a fluid which has no vascular connexion with the surrounding parts, and it produces within its interior a multitude of bags similar to itself. They are often met with in great numbers in the liver, and have been frequently seen in the lower part of the abdomen, between the bladder and rectum, where they have been the cause of retention of urine. The lungs are sometimes the seat of this species of hydatid. Sir Astley is induced to believe these hydatids "to be distinct animals:

"First, because they have an existence and growth of their own, having no vascular connexion with the part in which they are found, but being only encased and surrounded by a vascular and secreting cyst. Secondly, because they have the power of producing upon their interior surface their own species. Thirdly, that in the brain of sheep a similar bag is found, which, for several hours after the sheep has been killed, if it be put into warm water, has a distinct and very considerable vermicular motion; and, fourthly, because, on the surface of the abdominal viscera, and sometimes in their interior, an hydatid is found with a mouth and neck added to it, and consequently receives its food through the mouth, like other animals.

"The globular hydatid, therefore, may be considered, as to its mode of nourishment, the link in the creation between the animal and vegetable, as it receives its nutriment by absorption as the vegetable does; but the *tænia hydatigina*, as it is called, which has a mouth, is a perfect animal, with respect to the manner of its nutrition.

"The hydatid is supposed to be deposited in the structure in which it grows, carried there by the blood. Into whatever part it is thrown, it excites irritation, and becomes enclosed by an adhesive process, and which forms the cyst in which it is enveloped; but their origin is obscure, and the opinions respecting their deposition hypothetical. The parent hydatid is supported by a secretion from the internal surface of the cyst in which it is found; but the small hydatids in it are probably nourished by the fluid which the parent hydatid contains, so soon as they drop from, and cease to be connected with the parent cyst." (P. 47.)

The proper treatment of these hydatid tumors is to make an incision in them, and to discharge the bag, after which a simple poultice will be sufficient to heal the wound. If

the fluid is discharged by puncture, and afterwards reaccumulates, a seton may be passed into it, and the sac will slough. "When the fluctuation escapes observation, and the tumor is believed to be of a scirrhus nature, the surgeon removes it, and discovers the hydatid bag contained within; and he can then confidently assure the patient that she is perfectly free from any future danger."

The distinguishing marks of this disease are its central fluctuation, its solid circumference, and the absence of tenderness upon pressure. Neither before nor after operation is it dangerous.

Chapter iv. "*On the chronic Mammary Tumor.*"—This disease mostly attacks young persons, from the age of seventeen to thirty. They are generally otherwise healthy subjects, and the constitution does not usually suffer from this local malady. The symptoms which accompany this swelling are, that it grows from the surface of the breast, rather than from its interior. It therefore generally appears to be very superficial, excepting if it spring from the posterior surface of the breast, when it is deep seated, and its peculiar features are less easily discriminated. Such tumors are very moveable, generally not tender to the touch, but Sir A. observes that they are so occasionally at about the period of menstruation. Their growth is slow. They rarely acquire a considerable magnitude, usually weighing from one to four ounces. They are free from malignancy. They sometimes exist for many years almost in a stationary state, and then gradually disappear.

"Upon a nice manipular examination of this swelling, it is found to be lobulated, that is, composed of a number of lobes connected together, but leaving depressions between them; and, whatever size it may obtain, it still preserves this conglomerate character: the swelling might therefore very properly receive the name of the lobulated mammary tumor." (P. 53.)

Diagnosis.—The general discriminating marks of this disease are as follows: the youth of the patient, the general absence of pain, the continuance of good health, the slow progress of the tumor, its superficial situation, its extreme mobility, and, above all, "it is known from its lobulated feel, being distinctly composed of numerous lobes conglomerated into one mass, with a broken or divided surface."

In such cases the general health, if disturbed, is to be carefully regulated. If the digestive functions are imperfectly performed, mercurial alteratives, and light bitters with alkalies, will be beneficial. Locally, the Emplast.

Amm. cum Hydr. may be applied, if the part is completely indolent; or iodine ointment may be applied by friction upon the swelling. If the tumor is hot or painful, evaporating lotions or simple poultices are most productive of relief. Several cases of this form of disease are detailed.

In conclusion Sir Astley observes, that, "although these tumors are not in their commencement malignant, and they continue for many years free from the disposition to become so, yet, if they remain until the period of the cessation of menstruation, they sometimes assume a new and malignant action."

In Chapters v. and vi. we have brief descriptions of the "*Cartilaginous and Ossific Tumor*," and the "*Adipose Tumor*."

Chapter vii. "*On the large and pendulous Breast*."—The glandular structure of the breast sometimes grows to an enormous size, and becomes extremely pendulous, so as to reach to the fore part of the abdomen. This is not to be understood as the effect of relaxation, but to be an absolute growth of the secreting lobes, which can be distinctly felt to be enlarged and hardened, and are sometimes accompanied by a considerable degree of tenderness. Sir Astley has seen a very remarkable instance of this kind. The patient was fifteen years of age, and in good health: for three years the breasts had been increasing in size; she had menstruated irregularly. When Sir A. was applied to, the mammae were of the following extraordinary dimensions: the circumference of the left, twenty-three and a half inches; of the right, twenty-two inches. They were pendulous like a pear. Mr. JONES, of Haverfordwest, who transmitted a description of the case to the author, could perceive no tumor either in the breast or in the axilla. The patient was free from pain.

"The local treatment of this case consists in the application of a suspensory bandage from the back of the neck, under each breast, to produce artificial support; and the principle which is to be observed in the constitutional treatment of this malady, is to increase and to support the menstrual secretion; and for this purpose the exhibition of different forms of steel, united with aloes, will be found the most efficacious medicine. The Ferrum Ammoniatum, the Mistura Ferri composita, the Carbonate of Iron, will be the forms of steel which, united with aloes, will be most beneficial; and, if the biliary secretions be defective, the Pil. Hyd. Sub. Comp., or the Hyd. cum Creta, will be the best medicines." (P. 71.)

Chapter viii. "*On the Scrofulous Swelling of the Breast*."

Sir Astley has sometimes, though rarely, seen tumors of a scrofulous nature form in the bosoms of young women who had enlargement of the cervical absorbent glands. These swellings are in most cases confined to a single tumor in one breast; but, in one case, two existed in one breast, and one in the other. They are entirely unattended with pain, are distinctly circumscribed, are very smooth on their surfaces, and scarcely tender to pressure. They are very indolent, and vary with the state of the constitution, diminishing as it improves, and increasing as the general health is deteriorating. They can only be distinguished from the simple chronic inflammation of the breast by the absence of tenderness, and by the existence of other diseases of a similar kind in the absorbent glands of other parts of the body. They produce no dangerous effects, and do not degenerate into malignancy. They require no operation.

"The treatment in this case consists in improving the constitution by a warm and dry atmosphere, by an equally regulated temperature, by tepid sea-bathing, by gentle and regular exercise, by animal food of the most digestible kind, by milk, and by a farinaceous diet; a diet which shall nourish without exciting feverish heat, or calling much upon the powers of digestion. The best medicines are Carbonate of Iron and Rhubarb; the Hydr. cum Creta with Rhubarb; a grain of blue Pill, and two or three grains of Quinine; Infusion of Calumbæ with Rhubarb and Soda: for I conclude it will be admitted by every one who deserves the title of a surgeon, that we possess no specific remedy for this disease, but that we are required to assist the digestive powers, make better blood, and convey it to the system by an increased vigor of the constitution.

"Local treatment avails but little: a stimulating plaster or a lotion to the tumor, when the health is improved, may excite the absorbents to remove it." (P. 74.)

Chapter ix. "*Of the Irritable Tumor of the Breast.*"—The breast is liable to become irritable without any distinct or perceptible swelling, as well as to form an irritable tumor, composed of a structure unlike that of the gland itself, and which therefore appears to be of a specific growth.

"When the complaint affects the glandular structure of the breast, there is scarcely any perceptible swelling, but one or more of its lobes becomes exquisitely tender to the touch; and, if it be handled, the pain sometimes continues for several hours. The uneasy sensation is not confined to the breast alone, but it extends to the shoulder and axilla, to the inner side of the elbow, and to the fingers; it also affects that side of the body even to the hip. The patients cannot sleep on that side, and the pain is sometimes

so severe as to prevent even their resting on the diseased side; and the weight of the breast in bed in some instances occasions intolerable pain." (P. 76.)

When the pain is most severe, the stomach suffers, and vomiting is produced. The suffering is much increased prior to menstruation. There is no external mark of inflammation. This painful state remains for months, and even for years, with little intermission; but it has no malignant tendency. As there is no distinct tumor, an operation cannot be thought of.

"Besides this irritable and painful state of a whole or part of the breast, a tumor sometimes is found distinctly circumscribed, highly sensitive to the touch, acutely painful at intervals, more especially prior to menstruation, very moveable, often not larger than a pea, seldom exceeding the size of a marble: generally one only exists, but in other cases there are several similar swellings. Although they continue for years, they vary but little in size. I have never seen them suppurate: they sometimes spontaneously cease to be painful, and sometimes disappear without any obvious cause." (P. 77.)

The diagnosis of this disease is very easy. The pain by which it is accompanied, its tenderness to the touch, the suffering which succeeds examination, distinguish it from the hydatid, the chronic mammary tumor, and the scirrhus and fungous tubercle. In such cases Sir Astley has seldom known the menstrual secretion regular or healthy.

The treatment consists in diminishing general irritability, in lulling the local suffering, and in restoring the defective or diminished menstruation. These irritable tumors sometimes appear in other parts, and produce symptoms similar to those which arise when they are seated in the breast. The following case is related as an example:

"Miss B—, a patient of Mr. Brock, of Guernsey, had twice felt a severe pain in her knee in walking, at a considerable interval. Six weeks after the last attack, she discovered a little tumor, about the size of a pea, below the knee, which was extremely painful on the slightest touch: this I removed nine years ago. Twelve months afterwards she discovered, a few inches lower down in the limb, another swelling, which gave the same impression to the finger as the former, but it was more visible, as it projected the skin more; and it produced (as she expressed it) a scraping and pricking pain, as if numerous lancets were darted into the part, and as if all kinds of pain were there combined. It fortunately lasted only ten minutes at each attack; for, if it had continued longer, it would have been intolerable.

"The second tumor I removed eight years ago; and I had the

pleasure of seeing her in October last, at which time she had not had any return of the disease." (P. 84)*

Chapter x. "*On Ecchymosis of the Breast.*"—Allied to the irritability of the breast is a morbid change, which occasionally happens, of a bruised appearance upon this organ. It occurs at each menstruation, and is accompanied by exquisite sensibility, pain, and tenderness.

"The symptoms of this complaint are as follow: It occurs in girls who are in most instances under twenty-two years of age. It is preceded by severe pain in the breast and arm. The extravasation of blood begins a few days before menstruation, and it appears principally in a large spot, as if a severe blow had been inflicted. Smaller and less vivid spots may also be observed in other parts of the breast: it is sometimes a concomitant of an unusually large bosom. The part is exquisitely tender to the touch, and the pain with which it is accompanied passes down along the inner side of the arm to the ends of the fingers. It disappears a week after menstruation in some cases; but in others, when it is most severe, it continues until the next time the patient is unwell. It looks like the ecchymosis which often succeeds the application of leeches; or like the extravasation of blood under the skin which occurs in the arm after bleeding, when the opening in the skin has been smaller than that in the vein.

"It is a curious occurrence, strikingly showing the strong sympathy which subsists between the uterus and breast; for it is evidently the effect of the great determination of blood to the bosom just prior to the period of menstruation; and it indicates excessive irritability of the constitution, as well as the great delicacy and debility of the blood-vessels, which are unable to support this sudden determination which such sympathy produces.

"This complaint is entirely unattended with danger; but being accompanied with diminished, irregular, and sometimes profuse uterine secretion, and by considerable debility and irritability of the constitution, two objects must be kept in view in its treatment: the one is, by different forms of steel medicines, to increase the quantity, and render regular the menstrual discharge; and the other to augment the strength of the system, by the infusion of roses with sulphate of quinine. As to local treatment, the best application is the *Liquor Ammonia Acetatis*, with spirits of wine, in the proportion of five ounces of the former and one of the latter." (P. 85.)

The remainder of the volume is occupied by the splendid plates, and the accompanying descriptions. Although we

* A very similar case is mentioned by Mr. SPARK, of Newcastle, in the *Medical Gazette*, No. 65. The sufferings of the patient were excessive. The tumor was extirpated, and no pain was afterwards felt. The wound healed by the first intention.—REV.

have been desirous of giving a very full abstract of the text, it must be evident that the work derives a great part of its utility from the instruction imparted by the graphic illustrations. For the purpose of securing a faithful representation of the morbid parts, Sir Astley has always placed them in the hands of the artist as soon as possible after their removal from the patient. In every respect the plates are beautifully and skilfully executed, and, if the colouring be compared with the appearances of recently dissected parts, it will be found correct and natural.

We trust that this work will soon be completed by the publication of the second part. There are no diseases in the management of which surgeons of ordinary experience feel greater perplexity or responsibility than those which affect the female breast. The great advantage to the whole profession of possessing the opinions of Sir Astley Cooper upon so important a subject must be very evident.

A Treatise on the Diseases of the Chest, and on Mediate Auscultation. By R. T. H. LAENNEC, M.D. Regius Professor of Medicine in the College of France, Clinical Professor to the Faculty of Medicine of Paris, Physician to her Royal Highness the Duchess of Berri, &c. *Translated from the latest French Edition, with Notes and a Sketch of the Author's Life,* by JOHN FORBES, M.D. Member of the Royal College of Physicians, and senior Physician to the Chichester Infirmary. With Plates. Third Edition revised, with additional Notes.—8vo. pp. 736. Underwood, London, 1829.

THE rapid sale of this work is a proof of the high esteem with which LAENNEC is regarded in this country. Dr. FORBES, also, claims much more than the merit of a laborious and verbal translator. He has made many very judicious alterations and improvements upon his original, and has enriched the present edition with many additional notes. The whole work, indeed, has been carefully revised. But little more than a year has elapsed since the publication of the second edition: we then devoted three articles to the consideration of the first part of the work,* and shall now confine ourselves to the second part, which is equally important, although it is much more brief.

In this division the subjects considered are "Diseases of the Heart and its Appendages." So lately as the close of the last century, affections of the heart might still be classed among those diseases which were most imperfectly known.

* London Med. and Phys. Journal, for February, April, and May, 1828.

Notwithstanding the labours of LANCISI, MORGAGNI, &c., ordinary practitioners knew of no other cases than those of polypus of the heart, (an imaginary disease in their acceptance of the term,) and palpitation, (which they considered to be a nervous affection.) The researches of the above-mentioned pathologists, and those of CORVISART, made us acquainted with many organic lesions of the heart, but threw little light on their signs. It was still, perhaps, impossible to distinguish with certainty one disease from the other.

The positive signs of the organic diseases of the heart are derived partly from percussion, but chiefly from auscultation. The common, yet vague, symptoms arising from functional disturbance acquire also by the same means a much greater degree of certainty. The application of the hand, the only method in use before the time of AVENBRUGGER, furnishes us, in most cases, with no result whatever, and frequently deceives us in respect of the actual force of the heart's impulse or shock. It indicates less accurately than the pulse at the wrist, the regularity or irregularity of its contractions.

"Even percussion supplies us with only accessory or corroborative signs, which may frequently be wanting. In reference to this mode of exploration, we must notice two precordial regions, the right and left: the first comprising the space covered by the lower third of the sternum; the second, that which corresponds to the cartilages of the fourth, fifth, sixth, and seventh sternal ribs. The right precordial region naturally yields a very clear sound. Hypertrophy of the ventricles, the dilatation of these or of the auricles, a vast accumulation of blood in all the cavities of the heart, the growth of much fat around this organ, and effusions into the pericardium, may render the sound dull or dead. The same causes may produce the same effect in the left precordial region; but in this case the sign would be less conclusive, inasmuch as this region naturally yields but little sound in most persons, and hardly any in fat or œdematous subjects, or even in such as are very muscular. It is very uncommon for the sound to be wanting in either region, as high as the site of the auricles; and, if it is so, it indicates an enormous dilatation, such as exists only in the case of contraction of the mitral orifice." (P. 546.)

The alternate contractions of the auricles and ventricles of the heart give rise to sounds very distinct, and of different kinds, so as to enable us to study the actions of that organ even more exactly than by the dissection of living bodies. The truth of this apparently paradoxical assertion rests on the fact that the ear judges more correctly of the

intervals of sound, than the eye of the intervals of motions corresponding to these.

The first book is introductory: it treats of the exploration of the heart by means of the ear alone, or assisted by the stethoscope.

The second book contains a description of diseases of the heart in general. In the first section we have a detail of the symptoms common to all diseases of the heart. The severest and most common are—dilatation of the ventricles, thickening of their walls, or the union of both affections. Most frequently a single ventricle is affected; sometimes both are so in a similar or in an opposite manner, as in the common case of dilatation of the right ventricle with hypertrophy of the left, and vice versa. The persistence of the foramen ovale, the perforation of the septum between the ventricles, the ossification of the sigmoid valves of the aorta or of the mitral, excrescences on the same parts, and accidental productions formed in the heart, are of much rarer occurrence, and do not, generally speaking, impair the health, until they have reached such a degree as to give rise to hypertrophy, or dilatation of the ventricles. The dilatation and hypertrophy of the auricles are rarer still, and are perhaps always consecutive affections, depending on previous disease of the valves or ventricles. The general symptoms of all these affections are almost the same.

“These are, an habitually short and difficult respiration; palpitations and oppression, constantly produced by the action of ascending, by quick walking, by emotions of mind, or without any perceptible cause; frightful dreams, and sleep frequently disturbed by sudden starts; a cachectic paleness, and a tendency to anasarca, which, indeed, comes on after the disease has persisted some time. To these symptoms is frequently added the angina pectoris, a nervous affection, which will be described hereafter. When the disease has reached a high degree, it is recognised at a single glance. The patient, unable to bear the horizontal posture, remains night and day sitting rather than lying in his bed, with the face more or less swollen, sometimes very pale, but more commonly of a deep violet tint, either over the whole or only on the cheeks. The lips are swollen and prominent like a negro's, of a deeper purple than the rest of the face, or of this hue when it is quite pale. The lower extremities are œdematous; and the scrotum or labia, the trunk of the body, the arms, and even the face, are successively affected in the same manner. The same state exists in the serous membranes, whence arise ascites, hydrothorax, and hydropericardium, which accompany organic affections of the heart more frequently than any other disease. The congestion

and lentor of the capillary circulation are further shown by affections of the internal organs: for instance, hæmoptysis, pains of the stomach, vomiting, apoplexy (which frequently terminates such affections), and, most of all, dyspnœa, which last symptom has been the cause of confounding such diseases, with many others, under the name of asthma. These symptoms, however, as they show themselves in the diseases of the heart, have peculiar characters, which tend to distinguish them from such as occur in the affections most likely to be confounded with them.

"In the diseases of the heart the general circulation is not always so much affected as the capillary. Sometimes the pulse is irregular, but sometimes it is almost natural; and the hand, applied to the cardiac region, discovers only a regular and moderate pulsation. At other times the pulse is very strong, or altogether insensible; the heart yields a very great impulse, or none at all, its contractions are evidently irregular, and palpitation is constantly present. So severe a state of disease as this is not always beyond relief: we sometimes see the judicious combination of blood-letting, diuretics, and tonics, remove the impending suffocation, the palpitations, and dropsy, and restore to the patient, frequently for a long period, a tolerable degree of health; and it is commonly only after a great many similar attacks, recurring after considerable intervals, that the disease at length proves fatal." (P. 589.)

Dr. Forbes correctly observes, that this epitome of the general symptoms, as given by Laennec, is excellent as far as it goes, but it must be admitted that the paramount importance of the auscultatory diagnostics on his mind has rendered his description too brief. Dr. F., therefore, directs the attention of the reader to the ampler details on this subject in the classical works of CORVISART, TESTA, and KREYSIG. He remarks, also, that Laennec has hardly noticed one class of symptoms which merit particular consideration, those referrible to disordered or diseased stomach. The three distinguished writers just mentioned, and especially Testa, notice this state of the stomach at some length; "but none of these authors consider it in its highly important etiological relations, and its still more important bearings on the treatment of the cases in which it occurs. Gastric irritation, cerebral irritation, cardiac irritation, constitute, in many cases, such a strong chain of disease, every part of which influences and strengthens every other part, that no plan of treatment that does not embrace the whole can be attended with success." (*Translator.*)

Dr. Forbes has frequently verified the truth of a remark of Kreysig's, (sect. iii. chap. vii.) that the assumption of a posture in bed, which was previously intolerable, is a sign

of extremely bad omen. He has met with several cases of convulsions apparently depending on disease of the heart.

Sect. ii. "*Of changes produced by diseases of the heart in the texture of other organs.*"—In persons who have died from organic diseases of the heart, we find, upon dissection, all the marks of congestion of blood in the internal capillaries. The mucous membranes, especially those of the stomach and intestines, are of a red or violet tint; and the liver, lungs, and capillaries situated beneath the serous, mucous, and cutaneous tissues, are gorged with blood. The augmented colour of the mucous membranes varies much in degree and extent. Sometimes it is observed only here and there, under the form of small points or specks, disseminated over the surface of the membrane. At other times it occupies the whole extent of the surface, and has the appearance of being attended with some swelling of the part. These two appearances are sometimes so considerable, that, if we looked to them merely, without examining the condition of the heart, and without reference to the history of the patient, who had been found capable of taking wine and other stimuli, without experiencing pain, even up to the period of his death, we might be tempted to believe that the fatal disease had been a violent inflammation of the stomach and bowels.

"In fact, the degree of redness of these membranes, observed after diseases of the heart, is often much more intense and extensive than is found after true inflammation of these parts, as, for example, in dysentery; a fact, among many others, sufficiently proving the insufficiency of mere redness to characterize inflammation of the mucous membrane of the intestines, any more than the purple colour of the face in asthmatic patients is an erysipelas. In persons who have died of disease of the heart, particularly dilatation of the ventricles, we find, more frequently than in other cases, that intense redness of the inner membrane of the heart and large vessels, which I shall hereafter notice when treating of the diseases of the aorta. Lancisi and Senac, after Hildanus, consider gangrene of the limbs as a consequence of disease of the heart and large vessels. The late M. Giraud was of the same opinion; and since his time many practitioners have considered the gangrene of old persons as usually caused by ossification of the arteries. M. Corvisart justly doubts whether, in such cases, there is any thing else but mere coincidence of independent diseases;* and I think that the single circumstance of the rarity of the spontaneous gangrene of the limbs, compared with the frequency of disease of the heart and ossification of the

* "Testa (tome iii. p. 333,) and Kreysig (sect. iii. chap. vii.) are of the same opinion.—*Transl.*"

arteries, is sufficient to render the thing quite improbable. This is equally the case with the notion of Testa that ophthalmia, and sometimes the loss of the eye, may be ranged among the consequences of diseases of the heart.* (P. 592.)

It is confessed that none of these symptoms or results suffice to indicate, with certainty, disease of the heart: they are common to many other affections, and particularly to almost every chronic disease of the lungs. Neither the pulse nor the action of the heart supply us with any information upon which we can depend. "To mediate auscultation, therefore, we must turn, as affording the only means of recognising the diseases of this organ; and even it more frequently fails in this case than in any of the other diseases which it is calculated to discover." It must be remembered that, if we are ignorant of the previous state of the patient's health, which is almost always the case in hospital practice, we may mistake mere nervous palpitations for hypertrophy or dilatation of the heart.

The causes of diseases of the heart are as various as the diseases themselves. Ossifications are the result of some aberration of the process of assimilation, which is not easily understood. All diseases which give rise to severe and long-continued dyspnoea almost necessarily produce hypertrophy or dilatation of the heart, through the constant efforts the organ is called on to perform, in order to propel the blood into the lungs against the resistance opposed to it by the cause of the dyspnoea. Diseases of the heart, on the other hand, give rise to several diseases of the lungs: they are thus amongst the most frequent causes of oedema of the lungs, hæmoptysis, and pulmonary apoplexy. A neglected cold is frequently the original cause of the most severe diseases of the heart.

"To all these causes must be added the congenital disproportion between the size of the heart and the diameter of the aorta. M. Corvisart has, perhaps, gone too far in asserting that there can be no dilatation of the heart without the previous existence of a disproportion of this kind, or of a contraction, or some similar obstruction to the circulation, at a greater or less distance from the heart: it is, however, true that it is very common to find an aorta of small diameter in cases of hypertrophy or dilatation. Still this is not always the case, and, however rational such a cause may be, we can readily conceive many others. We know that the energetic and reiterated action of all muscles materially increases their size, as in the case of those of the right arm of the fencer, the shoulder of the porter, and the hands of most artisans. On

* "Op. cit. t. ii. p. 132."

the same principle we must admit that even nervous palpitations, or such as originate from moral causes, may, by frequent recurrence, produce a true enlargement of the heart.

"There is yet another congenital cause of disease of the heart, which appears to me to be of greater frequency than the small caliber of the aorta, above mentioned: I allude to a disproportionate thickness of one or both sides of that organ. I am satisfied that in a great many persons the parietes of one or both sides of the heart are either too thick or too thin from birth. In such cases there can be no doubt that the usual exciting causes, moral and physical, will be more apt to produce formal disease of the heart than in individuals in whom this disproportion does not exist." (P. 594.)

Laennec's account of the causes of the diseases of the heart is certainly imperfect, but Dr. Forbes supplies this deficiency in a long and excellent note.

By hypertrophy of the heart, Laennec means a simple increase of its muscular substance, without a proportionate dilatation of its cavities. On the contrary, these are most commonly much diminished in size. This affection is by no means common. It appears to have escaped the notice of Corvisart; for he seems to consider that increased thickness of the walls is uniformly accompanied by a proportionate dilatation of the cavities of the organ. BERTIN, in his "*Traité des Maladies du Cœur et des gros Vaisseaux*," has taken much pains to prove the separate existence of hypertrophy and dilatation of the heart. Laennec did not conceive that he was the first to point out the distinction in question, although he was not aware that Bertin had made such extensive researches upon the subject. Hypertrophy may exist in one or both ventricles, with or without a similar affection of the auricles. The auricles alone are sometimes affected in this manner.

"When affecting the left ventricle, I have seen its walls more than an inch, or even eighteen lines, thick at the base, that is, double or triple their size in the sound state. Commonly, this morbid thickening diminishes insensibly from the base to the apex of the ventricle, where it is scarcely perceptible: sometimes, however, the apex partakes in the enlargement, as I have seen it from two to four lines thick, which is double or quadruple the natural size. The columnæ carnæ of the ventricles and the pillars of the valves acquire a proportionate enlargement. The septum between the two ventricles becomes also considerably thickened in the disease of the left ventricle, (which fact seems to mark it as belonging to this rather than the other ventricle,) but in general, not so much so as the other parts. There are, however, exceptions, as we find, (and this has been well remarked by M. Bertin,) that the

hypertrophy is sometimes unequal in each part of the ventricles, or occupies only a single point, as the base, apex, or middle, the septum or loose part, the external surface or fleshy columns. The muscular substance in these cases is of a degree of consistence sometimes double the natural, and is of a redder colour. The cavity of the ventricle appears frequently to have lost in capacity what its walls have gained in thickness. Sometimes I have found this so small, in hearts twice the size of the fist of the individual, as scarcely to be capable of containing an almond in its shell. The right ventricle in such cases being proportionably smaller as the hypertrophy of the other is great, lies flattened along the septum, and does not extend to the apex of the heart. In extreme cases, it seems as if it were merely included within the walls of the left ventricle." (P. 598.)

When hypertrophy of the right ventricle occurs, the appearances are somewhat different. The thickening is more uniform, and never so great as in the left. Laennec has never found it greater than four or five lines.

We must refer to the work for the signs of hypertrophy of the ventricles.

To hypertrophy of the left ventricle, Corvisart applied the term of *active aneurism* of the heart. The same pathologist named a dilatation of the cavities of the ventricles, with decreased thickness of their walls, *passive aneurism*. Dilatation with hypertrophy of the ventricles are sometimes combined, constituting the *active aneurism* of Corvisart. This form of disease, Laennec states, is much more common than simple dilatation, and still more so than hypertrophy without dilatation. This complication may exist in one or both ventricles. "In the latter case, the heart acquires a prodigious size, sometimes more than triple that of the hand of the individual. The augmentation of volume is here the effect of thickening of the walls of the ventricles, and proportional enlargement of their cavities."

Signs.—The signs of this affection are a compound of those of hypertrophy and dilatation.

"The contractions of the ventricles yield at the same time a strong impulse and a very marked sound. Those of the auricles are also sonorous. The sound of the heart's action is heard over a great extent; and sometimes, particularly in thin subjects and children, even the shock is perceptible below the clavicles, on the sides, and even a little on the left side of the back. In the case of a woman who laboured under this affection, I heard and felt the contraction of the ventricles at the right and lower part of the back; and, although this patient was of a small stature and middling strength, the impulse and sound, in the places mentioned, were

greater than in the region of the heart in the case of a strong man in perfect health.*

"In this affection, the contractions of the ventricles are very easily perceived by the hand; which (particularly during palpitation) is moreover forcibly raised by the sharp, definite, and violent pulsations. Even in the absence of palpitation, if we attentively observe the patient, we frequently perceive the head, limbs, and even the bedclothes, strongly shaken at each contraction of the heart. The pulsations of the carotid, radial, and other superficial arteries, are frequently visible. If we press on the region of the heart, this organ, according to the expression of Corvisart, 'seems to be irritated by the pressure, and beats more forcibly still.' To these energetic contractions of the heart, according to this author, corresponds (when the disease affects the left ventricle) a pulse which is frequent, strong, hard, vibrating, and difficultly compressed. This state of pulse is, no doubt, frequently met with in hypertrophy with dilatation, as well as in simple hypertrophy of the left ventricle; I cannot, however, consider it, with Corvisart, as a sign of the active aneurism of the left ventricle, inasmuch as we very frequently observe a small and feeble, although regular, pulse, in subjects whose hearts are much enlarged and habitually violent in their action. The palpitations which take place in this affection present, under the stethoscope, the same characters as the habitual contractions in the same case, only in a more intense degree; they are seldom attended with irregularities, except on the approach of death. Sometimes, during these palpitations, besides the impulse of the heart, which seems communicated by a large surface, we can distinguish another which is sharper, clearer, and shorter, although occurring at the same time, and which seems to strike the walls of the chest with a much smaller surface. This blow seems evidently occasioned by the apex of the heart. The examination of the actions of the heart, first on the one side, and then on the other, (that is, under the lower part of the sternum, and between the cartilages of the fifth and seventh ribs of the left side,) enables us to ascertain precisely which of the ventricles is affected, if there is only one; or if they both are so, which is more commonly the case. Dilatation with hypertrophy, being, of all the affections of the heart, that in which this organ attains the largest size, it is in this, accordingly, in which the absence of the natural sound on percussion of the cardiac region is observed most frequently and most extensively." (P. 608.)

* "A singular case of pulsation in the right hypochondre, in a case of diseased heart, is recorded by Mr. WARD, in the London Med. and Phys. Jour. No. 291; in which the pulsation was owing to the right lobe of the liver, enormously enlarged, extending into the chest, and coming in contact with the heart. Many of the cases of pulsation felt very remote from the heart, may be explained by the intervention of a conducting medium superior to that which naturally exists in these situations; although this result arises also from many other causes. See 'Original Cases,' p. 137, 150.—*Transl.*"

In the next chapters, dilatation of one of the ventricles with hypertrophy of the other; dilatation and hypertrophy of the auricles; and partial dilatation of the heart, are described.

Induration of the muscular substance of the heart.—It has been already observed, that, in hypertrophy of the heart, the muscular substance possesses an unusual degree of firmness and consistence. Corvisart has seen this so great, that the heart sounded like a dice-box when struck, and the scalpel experienced great resistance in cutting it, and produced a peculiar creaking sound. The muscular substance of the heart, however, retained its natural colour, and did not appear to be converted either into the bony or cartilaginous tissue. Laennec is of opinion that this species of induration is extremely rare. He never met with a case of it, although Corvisart states that he has seen several. He observes that the ventricles, in a state of hypertrophy, always yield the *box sound* mentioned by Corvisart, in a degree proportioned to the degree of the hypertrophy. The author cannot admit, with Bertin, “that the induration of the heart may be considered as the first stage of the ossification, since there exist none of the anatomical characters of the transition of one of these states into the other. Induration usually occupies the whole of one ventricle, while ossification affects only a small portion of its walls, and, as we shall see hereafter, rarely attacks the muscular substance. If to these reasons, deduced from simple observation, we wish to add any arguments drawn from theory, it may be stated that induration supposes an increase of nutrition, and ossification a perversion of the nutritive action.” (P. 619.)

Softening of the muscular substance of the heart is recognised by the flaccidity of the organ, which, at first sight, looks as if withered, and it is found to be easily torn. The softening is sometimes carried so far that the muscular fibre is almost friable, the compressing fingers passing easily through the parietes of the ventricles.

“In this case, whatever may have been the patient's disease, the heart appears only half filled with blood and flattened, and the ventricles equally collapse, whatsoever may be their varying thickness. This affection of the heart is almost always attended by some change of colour in the organ. Sometimes this is deeper, and even quite violet; and this is particularly the case in severe continued fevers. More commonly, however, the softening of the heart is attended by a striking loss of colour, so as to resemble the palest dead leaf. This pale or yellowish tint does not always

occupy the whole thickness of the heart; sometimes it is strongly marked in the central portions, and very little on the exterior or interior surfaces. Frequently the left ventricle and the interventricular septum exhibit this appearance in a marked degree, while the right ventricle retains its natural colour, and even a degree of firmness greater than natural. Again, we sometimes find here and there spots of the natural colour and consistence in hearts which are, every where else, much softened and quite yellowish. This variety of yellowish softening is particularly observable in hearts of good proportion, and in those cases where dilatation is conjoined with a slight degree of hypertrophy. It is also found in simple dilatation, although it is more common to find this state accompanied by that species of softening which is marked by an augmentation of the natural colour of the organ. There is a third variety of softening of the heart, which will be noticed in another place, and which is attended by a pale white colour of the muscular substance. In this the degree of softening never reaches that of friableness; often it is scarcely perceptible; but the parts are flabby, and the walls of the ventricles quite fall together on being opened. This species of softening usually accompanies pericarditis, and is observed only in it." (P. 690.)

Softening of the heart not having hitherto engaged the attention of practitioners, Laennec remarks that it is very difficult to determine its degree of danger or its distinctive signs. M. BOVILLAUD considers softening of the heart as a consequence of inflammation, and looks upon the induration, as well as the increase or diminution of colouring of the heart, in the same point of view.

"The only proof brought in support of this opinion is this, that the muscles, the brain, liver, lungs, kidneys, and spleen, become soft when affected with inflammation. In respect of this, I would remark that the reasoning is here in a circle; since it ought to be previously proved that the softening of these organs, when existing alone and without pus, is the consequence of inflammation. On the other hand, if softening of the heart is the consequence of inflammation, this inflammation must be either some degree of that which produces pus, or one of quite a different kind, and having no tendency to produce this. On the first hypothesis, softening of the heart is so common an affection that we should, sometimes at least, find it arrived at the stage of purulent infiltration: but this state I have never seen, even in the case of softening that has reached so far that the muscular substance yields between the fingers like paste; the muscular fibres still retain their form, and present no trace of pus in their interstices; and I am not aware that pus has been found by any one in such cases. If, on the second supposition, softening of the heart is an affection of such a nature that it tends neither to the formation of pus, nor is attended by local pains, nor any of the local and general symptoms which

constitute inflammation; if the therapeutic measures found beneficial in inflammation are directly the reverse of those which the state of the individuals usually affected with softening of the heart seems to demand; why give the same name to affections so different?" (P. 622.)

Softening of the heart, in the opinion of Laennec, "is a disease *sui generis*, produced by some aberration of assimilation, whereby the solid elements of the tissue diminish in proportion as those which are fluid or semifluid increase." With every disposition to respect even the speculative opinions of Laennec, we can discover nothing more in this attempted explanation than that the heart is no longer firm because it has become soft. The author states that we ought to regard it as a general law of the animal economy, that all soft tissues become indurated in consequence of true inflammation; that is, an inflammation tending to the formation of pus. It is only the hard tissues, such as bone, cartilage, and the fibrous bodies, which become softer during inflammation, in consequence of the presence of an increased quantity of plastic lymph of a less consistent quality than that of bone.

The tenth chapter is very brief upon the subject "*of atrophy of the heart.*" The heart, like the muscles of voluntary motion, is clearly susceptible of diminution of size and loss of power, from the influence of all those causes which produce emaciation. This effect is, however, less remarkable in the heart than in other muscles, and does not become perceptible till after a considerable time. The author is not of opinion that diminution of the size of the heart can in any case be considered as a disease. He never observed any symptom which could be attributed to this cause. On the contrary, all persons in whom it was found appeared to him less subject than usual to inflammatory affections and disorder of the circulation.

"*Malformation of the heart*" forms the subject of the twelfth chapter. Dr. Forbes remarks in a note that the best and most complete account of congenital malformation of the heart has been furnished by Dr. FARRE. This subject has excited particular attention in Germany, and has lately formed the subject of several valuable inaugural dissertations: one of the best is that of Dr. HEIN, "*De istis Cordis Deformationibus quæ sanguinem Venosum cum Arterioso misceri permittunt.*"

The heart is sometimes surrounded by an unusual quantity of fat. It does not appear, however, either from the experience of Laennec or Corvisart, that any symptoms can

be detected which denote the existence of such an accumulation.

"*Fatty degeneration of the heart*" is occasionally met with.

"This latter is an actual transformation of the muscular substance into a substance possessing all the chemical and physical properties of fat. It is precisely similar to the fatty degeneration of the muscles observed by Haller and Vicq-d'Azyr. I have only met with it in a small portion of the heart at one time, and only towards the apex. In these portions the natural red colour is superseded by a pale yellow, like that of a dead leaf, and is, consequently, nearly the same as that of certain states of softening of the heart. This change of structure appears to proceed from without inwards. Near the internal surface of the ventricles, the muscular texture is still very distinguishable; more externally, it is less so; and still nearer the surface it becomes gradually confounded, both in colour and consistence, with the natural fat of the apex of the heart. In such cases, however, even the portions that still retain most of the muscular character, when compressed between two pieces of paper, still grease these very much. This character distinguishes this species of degeneration from simple softening of the viscus. I have never found rupture of the heart attributable to this change, any more than to the morbid accumulation of fat. It is denoted by no symptoms with which I am acquainted." (P. 638.)

The author has never met with ossification of the muscular substance of the heart. Corvisart found, in the case of a man who died of hypertrophy of the left ventricle, the whole apex of the heart, and more partially the columnæ carneæ of the left ventricle, converted into cartilage. FILLING, in an asthmatic subject, found ossification of one of the fleshy columns of the left ventricle.*

Cartilaginous and bony induration of the valves of the heart not unfrequently occurs. The eighteenth chapter contains some interesting remarks on this subject.

"*Of Concretions of Blood, commonly termed Polypi, of the Heart and large Vessels.*"—It was formerly the custom to attribute to the polypous concretions of the heart observed after death, the symptoms which truly depend on the enlargement of that organ. These concretions, however, are very frequently found in persons who have never exhibited any symptoms of disease of the heart: "in truth, they are met with in three fourths of dead bodies." It is even suggested that "perhaps the existing epidemic constitution contributes as much to their production as the particular condition of the individual." Laennec has been led to this notion by

* Hufeland's Journal, b. xv. p. 155.

having found these "polypi," as they are termed, more often, and much larger, at certain times than others. He is opposed to the opinion of PASTA, MORGAGNI, and others, that such concretions of blood begin to form merely in the last struggles of life. "Many facts prove that these concretions can be formed during life: the phenomena of aneurisms alone prove this; and, besides, we sometimes find veins, and even arteries of considerable size, completely obstructed by concrete fibrine." This argument appears to us not even specious, much less is it satisfactory. The admitted fact that concretions of blood are found in an aneurismal artery will not fairly lead to the inference that the same occurrence will take place in the heart, without some deviation from its natural condition, which could exert a similar influence to that produced by aneurism upon the circulation of the blood. We do not deny that spontaneous coagulation of the blood may take place, "particularly at the very close of life, when the circulation is performed only in an irregular and imperfect manner." We only object to the endeavour to support this still doubtful fact by the phenomena which occur in aneurism.

"When the polypi of the heart are of a large size, I conceive they may be recognised by the stethoscope. In several cases I have prognosticated their existence from the following signs; which, nevertheless, I dare not propound as certain, as they are not founded on a great many facts: In the case of a patient, whose heart had been acting regularly, if the pulsations suddenly become anomalous, obscure, and confused, so as not to be analyzed, we may suspect the formation of a polypus. If the disordered action exists on one side of the heart only, we may consider the thing as almost certain. For instance, if we find the pulsations of the heart under the sternum confused and tumultuous, although the day before they had been regular, we may look upon the formation of a polypus in the right cavities as very probable; and the more so if the contractions of the left ventricle, explored between the cartilages of the fifth and sixth ribs, are more distinct." (P. 655.)

Notwithstanding the contrary opinion of some modern observers, Laennec thinks that inflammation of the inner membrane of the heart and large vessels is very rare. The correctness of his opinion upon this subject he maintains from an examination of the different morbid appearances which have been considered as proofs of the inflammation in question. 1st. Redness of the membrane. The inside of the aorta and pulmonary artery are often found uniformly reddened, as if stained by the blood they contained. This colouring is of two kinds, either bordering on scarlet, or

of a brown or violet hue. This colour is quite uniform, as if painted, without any trace of vascularity, only sometimes more intense in one place than another. Sometimes this stain diminishes progressively from the aorta, but frequently it terminates quite abruptly, with irregular edges. Sometimes nearly the whole arterial system presents the same colour. This redness is attended by no sensible thickness of the part, and it entirely disappears after a few hours' maceration. FRANK, who observed it through the whole tract of the arteries, considered it as the cause of a particular and uniformly fatal fever. KREYSIG, BERTIN, and BOVILLAUD adopt the same opinion.

"The first and most natural idea respecting the redness of any part naturally white, is that it is the result of inflammation. But mere redness, without thickening of parts, does not sufficiently characterize this state; while the abrupt termination and exact circumscription presented by the redness in certain cases, seem not easily to accord with the nature of inflammation, and give rather the idea of impregnation by a coloured liquid, which had been poured irregularly over the membrane, or which had only touched it partially, on account of its small amount.

"I am extremely doubtful whether this kind of redness gives rise to general symptoms sufficiently constant or severe to indicate its presence. I have found it in subjects dead of very different affections, and have never been able to foretel its existence by any constant signs. A rather prolonged agony, in subjects still vigorous, yet cachectic from diseased heart or otherwise, has appeared to me frequently to accompany this affection. In cases of this kind the blood is never strongly coagulated, and the body most commonly affords marks of decomposition." (P. 656.)

"I think we must conclude that the redness of the lining membrane of the heart and large vessels cannot, in any case, be considered as proving the existence of inflammation: on the contrary, that we may consider it as being the result of a process taking place in the dead body, or in the last agony, in every case wherein we find it coinciding with a prolonged and suffocative agony, a manifest change in the fluids, and a more or less marked state of decomposition. This is a state of parts to which I wish particularly to call the attention of pathologists, so that they may avoid confounding the causes with the effects of diseases. The discrimination of the congestion of the capillaries from inflammation is often difficult, but it is of the utmost importance that it should be made.* In the case now in question, we may be justified in suspecting inflammation when the redness is accompanied with swelling and thickening of the part, and with an

* For some valuable observations and experiments on the subject of redness of the inner coat of the blood-vessels, I refer to a memoir of MM. Rigot and Tronseau, in the *Archives gen. de Med.* t. xii. The result of the researches of these gentlemen corroborates the views of M. Laennec.—*Transl.*

extraordinary development of capillaries in the middle coat of the vessel; but I am not sure that even these characters united would prove the existence of inflammation in the case of a body that was considerably œdematous." (P. 659.)

The formation of a layer of coagulable lymph on the inner surface of the heart and vessels is the most unequivocal sign of inflammation of this membrane, and indeed, with the exception of ulceration, is the only certain one.

The remaining chapters treat of *excrescences of the valves and internal walls of the heart*, of *pericarditis*, of *hydro-pericardium*, of *accidental productions in the pericardium*, of *organic affections of the vessels of the heart*, of *the treatment of the organic diseases of the heart*, and of *nervous affections of the heart and vessels*. Laennec is opposed to the doctrines of Heberden, Parry, and most physicians of England, Germany, and Italy, respecting the cause of *angina pectoris*. He states that

"Angina pectoris, in a slight or middling degree, is extremely common, and exists very frequently in persons who have no organic affection of the heart or large vessels. I have known many individuals who have suffered a few very severe but short attacks of it, and had no further return of it. I am even of opinion that the prevalent type of disease influences its development, as I have some years met with it frequently, and hardly at all in others. On the other hand, it is certainly true that this affection frequently coincides with organic diseases of the heart; but nothing proves even then that it depends upon such diseases, inasmuch as they are of various kinds, and as the angina exists without any of them. I have examined several subjects who have laboured under this disease, and in whom there coexisted either hypertrophy or dilatation of the heart; and in none of these did I find the coronary arteries ossified. One of these died suddenly during an attack of angina; and such a result need not surprise us, when so severe a nervous affection coexists (as in this case) with extensive hypertrophy. Dr. Desportes, in a dissertation published some years since, has stated opinions very analogous to mine respecting the nature and seat of this affection: he considers its site to be in the pneumo-gastric nerve." (P. 703.)

Dr. Forbes is entitled to the gratitude of the English reader for the great labour he has bestowed upon this translation of Laennec's invaluable work. Various parts of it we have collated with the original, and can warmly recommend it to the attention of the profession. It is not merely a faithful transcript: the numerous notes of the translator throw additional light upon many subjects of practical importance which Laennec has but cursorily considered. A copious alphabetical index would be an improvement to a future edition.

Napoleon à Sainte-Hélène. Opinion d'un Médecin sur la Maladie de l'Empereur Napoléon, et sur la Cause de sa Mort. Offerte à son Fils au Jour de sa Majorité. Par J. HÉREAU, ancien Chirurgien ordinaire de Madame Mère, et premier Chirurgien de la Impératrice Marie-Louise.—8vo. pp. 228. Paris.

THE author's professed motives for writing this work are, a love of truth and an earnest desire to remove the fear of hereditary cancer from the mind of the young Napoleon: but, if these were really his motives, we imagine he would go immediately to the point, and not weary the reader by a tedious and gratuitous refutation of never-believed and now-forgotten rumors of "poisons, stings, and death;" nor disgust him by exaggerated statements of facts, and by copious and paltry abuse of the English government, and of every illustrious character whose energy or prudence conspired to overthrow the enemy of liberty, the great idol of French ambition and vanity. He appears, then, to be instigated by party and selfish views, and being a factious politician, rather than a medical writer, will not long detain our attention.

According to our author, it is still very generally believed in the French provinces that Napoleon was removed by poison, and that the companions of his captivity were not permitted to return to France until they gave a solemn promise of secrecy. The author does not share this opinion; but he is so weak as to consider it worth refutation, to which purpose he devotes an entire chapter.

In his second chapter, he attempts to prove that Napoleon was not hereditarily liable to cancer; for he contends that the nature of the disease of which his father died is not precisely known; that all Napoleon's brothers and sisters, and their children, are exempt from apparent predisposition to this disease, as also his mother, who is now in her seventy-eighth year, and to whom he bore a great resemblance, intellectual as well as physical, but was totally unlike his father. It would be unreasonable to deny the collective force of these facts; but, in reference to the argument derived from the want of likeness between the father and the son, it may be asked whether we do not often find relations whose mental faculties and physical shape and proportions are dissimilar, while their instinctive propensities, and, it may be presumed, those peculiar arrangements of structure which constitute predisposition to disease, are analogous.

Having settled the question of hereditary cancer in the negative, the author proceeds to inquire "whether the in-

fluence of the climate of St. Helena was sufficient to occasion Bonaparte's complaint?" On this subject he displays either great want of candour or unpardonable ignorance, as may be seen in the subsequent passage: "From that moment (a year after his arrival,) the Emperor was quite convinced that this unhealthy island had been chosen by the English government on purpose to destroy him, and that they had calculated that his death would be thus effected quite gradually enough to appear natural."

This imputation is as unfounded as it is illiberal; for St. Helena is so far from being generally considered unhealthy, that people who are taken ill in India not unfrequently repair to that island, in order to recruit their strength. But it was not possible to find any climate on the face of the earth which, without competent exercise, should keep in health a body which had been always in action, and should preserve a mind which had been so long obeyed, and so much excited by great events, free from vexation and remorse at the remembrance of vanished power and foiled ambition, when its daring was no longer available, its range limited, and its pride controlled and humbled. It is, indeed, probable that a reverse of fortune much less sudden, complete, and degrading, would ultimately have undermined the constitution of such a captive, without the deleterious influence of climate, or of any other merely physical cause.

"But *quiet* to quick bosoms is a hell,
And *there* hath been thy bane!"

It is with greater reason that M. Héreau inveighs against the restrictions to which Napoleon was subjected; but here, as elsewhere, he exaggerates, distorts, and garbles nearly every statement which he makes.

The medical attendants do not escape without being brought before the all-censuring tribunal of this self-erected judge; and Antommarchi, the Emperor's last surgeon, is not only condemned as destitute of even the lowest degree of medical skill, but likewise reproached as a sacrilegious monster for daring to examine, after the method of Gall and Spurzheim, the cranium of the lifeless hero.

After having commented on the symptoms and treatment of Napoleon's complaint, the author proceeds, in the fourth chapter, to analyze, rather minutely, the descriptions given of the appearances of the body after death: and here he attempts, but in a most unsatisfactory manner, to prove that the disease of which Bonaparte died was chronic gastritis, and not (as was supposed both by his private attendant

and by the English surgeons who visited him during his illness, and were present at the inspection of his remains,) a cancerous affection of the stomach. Our author is not equally strong in argument as he is bold in opinion; nor do we think it possible to devise any train of reasoning powerful enough to prove the truth of M. H.'s assertion to any one in possession of the facts contained in both accounts of the inspection of the body after death, the veracity of which cannot be doubted, and which M. H. has neither suppressed nor refuted; but which he must prove incorrect before we can receive his notion as true.

Whoever places the same reliance on the judgment of the six* surgeons whose opinion is expressed in the following passage, as on that of M. H., cannot, we think, agree with the latter in believing that merely chronic gastritis was the disease of which Napoleon died. "Nearly the whole internal surface of the stomach was in a state of cancer, or of schirrus degenerating into cancer." "It was perforated near the pylorus, and contained a quantity of thick dark matter, resembling coffee grounds, and very fetid."

COLLECTANEA.

Floriferis ut apes in saltibus omnia libant,
Omnia nos, itidem, depascimur aurea dicta.

PHYSIOLOGY.

Functions of the Intestinal Canal and Liver in the Human Fœtus.—A very interesting paper on the above subject was lately read at the Royal Society, by Dr. LEE. From the circumstances of the early development of the liver and intestines of the fœtus, of the copious supply of blood which they receive, and of the great space which they occupy in the abdomen, the author was led to the conclusion that they performed some important functions in the fœtal economy. Although no nutritive matter can be furnished by the mouth, yet the contents of different portions of the alimentary canal were found, both in appearance and chemical composition, to have a striking analogy to those of the same parts of the canal in the adult, where the processes of assimilation and absorption are performed. A semifluid matter, possessing all the characters of albumen, is found closely adhering to the inner walls of the small intestine, and is more especially abundant around the papillary projection, through which the common duct of the liver opens into the duodenum, and diminishes in quantity as we trace it towards the termination of the ileum. The great intestines are generally distended with a dark green homogeneous fluid,

* The five English surgeons and Antommarchi, by whom the body was examined after death.

containing no albumen, and apparently excrementitious. No albumen can be detected in the contents of the stomach: hence the author infers that an absorption of some nutritious substance (which he brings forward several arguments to show must be derived from the liver,) takes place from the intestinal canal in the latter months of gestation. He states that in two instances he detected the presence of a substance similar to that which he had found in the duodenum, in the hepatic duct itself. Hence he is led to the conclusion that the function of the liver in the fœtus is not confined to the separation of excrementitious matter from the blood, but that it supplies materials subservient to nutrition. That the substances existing in the intestines of the fœtus are not derived from the mouth, is proved by these being equally found in encephalous children, or where the œsophagus is impervious, as where no such malformation had existed.

A note is subjoined to this paper by Dr. PROUT, giving an account of the mode by which he ascertained the chemical character of the substance referred to in his examination. The paper is accompanied by drawings of the intestinal tube in the fœtus.—*Philosophical Magazine.*

Experiments on the Velocity of the Circulatory Motion of the Blood, and on the Quickness with which the Secretions are performed. By E. HERING, Professor at the Veterinary School of Stutgard.

THESE experiments, to the number of eighteen, were made on horses. There was injected, or rather infused, into the jugular vein, a solution of hydrocyanate of potash and iron. To introduce the liquid he employed a glass tube, of the size of a writing quill, capable of being closed by means of a stop-cock, and surmounted by a brass funnel, holding two ounces of liquid. The tube being introduced into the vein, the funnel was filled, and the cock opened, to be shut again the moment the liquid had passed into the vein. In this manner the access of air was prevented. After some time a vein was opened in another part of the body, and the blood examined by chemical reagents. The animals were killed some time after, and the traces of the liquid introduced was sought for in the secreting organs and their products.

The second series of experiments is to form the subject of a separate memoir.

As a reagent for discovering the hydrocyanate of iron in the blood, the author preferred the sulphate of iron to the sulphate of copper, or the hydrochlorate of iron. To form a blue precipitate with this salt, it was only necessary to add a little hydrochloric acid. The hydrocyanate of potash and iron was also recognised, although existing only in the proportion of one to 20,000 in the serum of the blood. The small quantities of hydrocyanate not being discoverable in the coloured blood, it was necessary to let it rest from twenty-four to forty-eight hours, to have a clear and limpid serum. Some drops were let fall on white paper, and there were afterwards added a few drops of a solution of sulphate of iron, (one grain in three ounces of distilled water:) a drop of concentrated hydrochloric acid, which was added in the last place, instantly betrayed the presence of the hydrocyanate. This procedure is equally applicable to the solid parts that are submitted to examination.

1st. A solution of hydrocyanate of potash and iron, introduced into the jugular vein of the horse, runs the course of the circulation, and arrives in the jugular vein of the opposite side, in an interval of from twenty to twenty-

five seconds, or from twenty-five to thirty. It arrives in from twenty-three to thirty seconds in the external thoracic vein of the opposite side, in twenty seconds at the vena saphena major, in from fifteen to twenty seconds in the mesenteric artery, and in from twenty to twenty-six seconds, in the maxillary artery; lastly, in from twenty to twenty-five, and from twenty-five to thirty seconds, in the metatarsal artery, always on the opposite side to the place of injection.

If the liquid introduced by this injection is moved by the same means as the blood, the velocity of the motion must be the same in both. It appears that the velocity of this motion is not increased in the ratio of the number of pulsations of the heart; for in a horse in which the pulse was sixty in the minute, and in two others in which it was from thirty-six to forty-four, and from forty-eight to fifty-two, the results were the same. Yet in another, in which the pulse was from thirty to forty-four, the circulation was found to be some seconds slower.

2d. The hydrocyanate of potash and iron is promptly secreted by the serous membranes, but in small quantities; and this in the direct ratio of their distance from the heart. Thus, the secretion commences by the internal surface of the pericardium, where it is also the most abundant; it then takes place in the pleura, the peritoneum, and lastly in the articular capsules. The cerebral cavities were opened only in a few cases; and there was never found any trace in them of the saline solution injected. In the other serous cavities, the presence of this solution was discovered two, three, four, seven, and fifteen minutes after injection. These moments were also those when the animal ceased to give symptoms of life.

3d. The mucous membranes secrete the injected solution less quickly than the serous. A few minutes are, however, sufficient to discover the foreign principle at their free surface; and soon after it is found at their other surface. The mucous membrane of the right half of the stomach secretes more promptly than that of the intestine, and the latter more quickly than the surface of the lungs. Secretion is much slower in the genito-urinary surface; what was found of the solution in the urinary passages came only from the kidneys.

The mucous surfaces covered with an epithelium (as the walls of the mouth, the pharynx, the left half of the stomach, in the horse,) gave no traces of secretion of the saline solution injected.

4th. The liver, the spleen, the thyroid gland, &c. allow the presence of the hydrocyanate to be detected but with difficulty, on account of their dark colour. The salivary glands appeared to perform a considerable part in the elimination of the foreign substance.

5th. The kidneys act also very powerfully. The reagent manifests the presence of the hydrocyanate at the expiration of one minute in the cortical and tubular parts, and in the pelvis. The passage of the urine through the ureters being rather slow, the consequence is that the bladder does not present traces of the foreign precipitate until after a pretty long interval. The small blood-vessels of the kidneys gave signs of reaction, while the large ones gave none; whence it might be concluded, either that the circulation is slower in the former, or that the hydrocyanate already commences beforehand to separate from the blood.

6th. In the lungs this salt is not so difficultly discovered as might have been presumed.

7th. The saline solution adheres in some cases to the walls of the blood-vessels, and is then easily discovered by the reagents; more frequently it does not adhere to them. Sometimes it adheres in some of them, and not in others. The cause of this difference is unknown.

8th. The shortest time which the solution takes to reach the thoracic duct is still undetermined. A minute sufficed in one case, and from two to five minutes in others. It is only discovered a little later in the lymphatic ganglia, although it already occurs in the thoracic duct. It therefore would appear, says the author, that there is a direct communication between the arteries and lymphatic vessels.

9th. The foreign substance introduced into the blood is quickly ejected by the secreting organs, especially by the kidneys. In from five to eight hours there no longer remained any traces of it in the products of the secretions; and in twenty-four hours all traces had disappeared, even from the solid parts.

10th. Lastly, it appears from these experiments, that the hydrocyanate of potash and iron may be mixed with the blood without inconvenience to the animal. A solution of indigo has not the same advantage. A solution of sulphate of iron injected into the blood coagulates it, and speedily causes death.—*Zeitschrift für Physiol.* t. ii. p. 85.)

PATHOLOGY.

Case of Pulmonary Apoplexy. By Dr. PINGRENON, Surgeon of the Royal Artillery.

M. Del—, residing at Fère, of the middle size, rather fat, aged twenty-nine, was several years subject to affections of the stomach, for which he occasionally applied leeches to the anus. On the 31st August, 1828, after six months of unremitting occupations at the desk, he was seized with a slight return of his old complaint, for which he could assign no cause, and for the removal of which he adopted only a cooling regimen. But, as his health daily grew worse, he sent for Dr. LEFRANC on the 2d of last September, who found the patient confined to his room: his face was pale, his eyes swollen and watery, and, on rising to reply to the questions of his physician, he complained of a fixed pain at the middle of the sternum, attended with heat and some difficulty of breathing, and suddenly exclaimed that "the pain was quite gone." His face became immediately livid, his lips were covered with a bloody froth, and he fell down and expired before any assistance could be rendered.

On immediately inspecting the exterior of the body, livid stripes were noticed at the anterior and superior parts of the thorax, which disappeared the next morning.

Drs. Pingrenon and Lefranc opened the body forty-eight hours after death, and remarked the following particulars:

The body had lain, since the patient's decease, on the back, with the head rather elevated: there was some bloody froth on the mouth; the face and scalp were livid and emphysematous; the sides of the head, front of the neck, upper and anterior parts of the thorax, were all, as far downwards as the mammæ, more or less emphysematous, swollen, and of a dark slate colour, which gradually disappeared towards the abdomen. The belly was somewhat

distended with flatus. The back of the trunk, &c. presented no unusual appearance.

The integuments of the head were very loose. The dura mater was not vascular, but somewhat of a dull colour. The lateral and longitudinal sinuses were empty; as were also the internal carotids, which had been divided to extract the brain. On the arachnoid membrane and pia mater there were some dark red patches, and some minute black coagula between a few of the upper and middle convolutions of the brain. The cortical and medullary substances had no uncommon appearance. The lateral ventricles were empty. The choroid plexuses were injected with darkish blood.

The cellular membrane of the anterior surface of the thorax was very dark and vascular, and crepitated when pressed together with the fingers. The muscles were of a pale red, and rather soft. The lungs were much distended, and in one spot adhered slightly to the pleura costalis: towards their summit they were of a deep violet colour, and crepitated; in other parts they were gorged with black blood, which, notwithstanding many incisions, was with difficulty squeezed out. On washing the divided portions, the parenchyma was found of a dark colour, owing to the cellular membrane containing within its cells a quantity of coagulated blood, by which the lungs were rendered impervious and apparently hepatized. The pericardium was sound, but contained four drachms of bloody serum. The heart was pale and soft; the auricles and ventricles were empty.

The stomach was distended with air, and there were dark red spots in many parts of its external surface. The great omentum was much injected, and drawn back towards the great curvature of the stomach, the mucous membrane of which was soft and deeply corrugated, and stained with spots of a blackish description near the cardia, along the small curvature, and towards the pylorus, which, after washing, retained a mottled appearance. In the small intestines slight traces of inflammation were visible, and the air they contained was rather fetid. The liver was small, and its concave surface was of a deep violet colour. The gall bladder was full of yellow bile, which was beginning to transude. The other viscera were not examined.

Pulmonary apoplexy is one of those diseases whose etiology and gradual development are very imperfectly understood. The suddenness with which it attacks those who appear to be in perfect health; the rapidly fatal consequences which always ensue; the extraordinary traces of alteration which mark its occurrence, afford ample scope for study, and should engage us not to omit any facts which are in the least calculated to elucidate this obscure department of pathology. It is with this view that we have detailed the above case, on which we forbear making any reflections, trusting that it may eventually elicit some useful communications from others.

Dr. Pingrenon considers that the pulmonary congestion might, in this instance, be owing to sympathy between the stomach and the lungs.—*Revue de Médecine, Française et Etrangère*.

Case of Pneumo-Thorax; with an Account of an Operation performed for its Relief, the Effects of the Operation, and the Appearances on Dissection. By Dr. JAMES JOHNSON.

Mr. Cornish, surgeon, residing in Milner place, near the Coburg Theatre and aged about twenty-seven or twenty-eight years, became affected with

dyspnœa and symptoms of thoracic inflammation, about the latter end of November or beginning of December last, which he neglected for many days, and continued to pursue his avocations in the three branches of the profession. About the 15th or 16th of the same month, he was accidentally seen by Mr. COOKE, (an intelligent practitioner, of Bridge-street, Lambeth,) who strenuously recommended sanguineous depletion, confinement to the house, and the other items of the antiphlogistic treatment. It was with difficulty he could be persuaded to take to his room, but he was too ill to go on longer with his practice.

On the 19th or 20th of December, Dr. JOHNSON was requested to see Mr. Cornish, and found him in the following condition: The patient was of the scrofulous character. He was lying on a sofa on his right side, breathing with considerable difficulty, and frequently coughing; the expectoration was scanty, and extremely tenacious, but without any purulency; the pulse was 130, sharp and wiry; skin not very hot nor dry; tongue moist, thirst moderate; right cheek flushed; urine high coloured and scanty. He complained of great difficulty of breathing, had pain in the centre of the chest, and could only lie on the right side. On uncovering the thorax, the muscles of respiration were seen in violent action, but the breathing was principally carried on by the diaphragm. There was no perceptible difference in the size of the two sides of the chest, but a very remarkable difference in the sound emitted on percussion: the *left* side sounded louder than natural, the *right* sounded considerably duller than natural. On applying the ear to the left side, which sounded so well, little or no respiration could be heard: on listening to the right side, which sounded so dull, the respiration was very loud, and accompanied with much wheezing. The heart was felt beating rather to the right of the middle of the sternum, and no trace of it could be felt in the left side.

These phenomena appeared to Dr. Johnson to be very unfavorable; but, as inflammatory action was still unequivocal in the case, Dr. J. advised Mr. Cooke (who kindly and zealously attended his afflicted neighbour till the last) to take away more blood, both generally and locally. Digitalis, colchicum, and antimony were also given in powerful doses, with the view of making an impression on the circulation.

December 21.—The urgency of the dyspnœa was a little, and but a little, relieved by the depletion: the blood was remarkably buffed and cupped. On examining the chest this day, Dr. Johnson and Mr. Cooke found that the left side was even more sonorous than before, and the respiration there still more indistinct; the pulsation of the heart was rather farther to the right; the right side very dull on percussion, and the respiration very noisy and confused. But a most important feature of the case now attracted attention, namely, the metallic tinkling (*tintement métallique*), which was distinctly audible in the left side of the thorax, not only when the patient coughed or spoke, but even during every inspiration and expiration. Dr. Johnson had now no doubt of the existence of pneumo-thorax, as every person who put the ear to the chest heard the tinkling as plainly as himself. Upon accurate examination, the left side was found to be very sonorous back almost to the spine; which led to the conclusion that the quantity of ærons, purulent, or sero-purulent effusion was very small in quantity when compared with the æriform extravasation. What was now to be done? There was still symp-

toms of thoracic inflammation present; and to quell these, and promote a free expectoration, every means that could be devised was put in force.

The next five or six days were consumed in the furtherance of these indications, but with no effect in mitigating the difficulty of breathing: which, indeed, gradually increased, the pulse seldom coming under 130 in the minute, with great and distressing jactitation.

In the course of the above period several medical gentlemen saw the patient, and Dr. WALSHMAN was added in daily consultation with Dr. Johnson and Mr. Cooke.

On Monday night, the 29th December, the patient nearly expired from suffocation; and next morning (Tuesday, the 30th,) Dr. Johnson explained to the patient the nature of the case: namely, that there was an aperture in the left lung, through which air was extravasated into the left pleural cavity, which cavity also contained some fluid, the precise nature of which could not be ascertained. It was stated to Mr. Cornish that the increasing collection of air was pressing severely on the right lung, that it had already pushed the heart into the right side of the chest, and that he saw no prospect of relief but from an operation.

Dr. BLICK, of Walthamstow, examined the patient on Tuesday morning with Dr. Johnson, and was so convinced of the existence of pneumo-thorax as the cause of the dreadful dyspnoea, that he volunteered to perform the operation. Things, however, were not sufficiently ripe for such a step, and Dr. Johnson requested the patient to name a surgeon of eminence to join in the consultation. He named Mr. LAWRENCE; and Dr. Johnson waited on Mr. L. to request his opinion on the case. Mr. Lawrence, Dr. Walshman, Mr. Cooke, Mr. J. H. Johnson, and some other medical men, met at three o'clock on that day. Mr. Lawrence accurately examined the patient: he was lying on his right side, as usual, breathing most laboriously; his countenance sunk; the pulse between 130 and 140, weak and somewhat irregular; the skin was cool, and somewhat moist; he had had no sleep for many nights. On laying bare the chest, the action of all the respiratory muscles was painful to behold, and it was evident that but a very small portion of air could be taken in at each inspiration: there was no perceptible difference in the size or shape of the two sides: the left sounded hollow throughout almost its whole extent, when Mr. Lawrence struck it; the right side emitted an extremely dull sound. The apex of the heart was now beating rather to the right of the right nipple. When Mr. Lawrence applied his ear to the left side of the thorax, he distinctly heard the metallic tinkling,* as did every one of the medical gentlemen then present. The respiration was loud and rattling in the right lung, and the expectoration muco-purulent, with streaks of blood and many black particles.

On retiring to consult, it was the opinion, not only of Mr. Lawrence, but of all the other attendants, that Mr. Cornish was so near death as to render any operation hazardous, if not unavailing: indeed, it was believed that the patient would most likely expire during such an operation as was contemplated. Mr. Lawrence, however, candidly avowed that he was satisfied of

* Some of the medical gentlemen present, and particularly Mr. J. H. JOHNSON, compared the metallic tinkling to the sounds emitted by a musical snuff-box; and this, in reality, is a more familiar as well as a more exact similitude than that which LAENNEC has employed.

the existence of pneumo-thorax, both from the confidence of Dr. Johnson's diagnosis, and from the phenomena which he had himself observed during the examination, by percussio and auscultation. He also stated, it as his opinion that, under more favorable circumstances, and with the same kind of phenomena present, the operation of paracentesis thoracis would be warrantable, as the only probable mean of affording relief, whether temporary or permanent, from the difficulty of breathing resulting from the pressure of air and other fluid extravasated in the cavity of the pleura. An anodyne was prescribed.

The gentlemen separated without any resolution to meet again, as Mr. Cornish appeared to be dying; and the unfortunate patient himself expressed the most poignant disappointment that no operation was undertaken for his relief.

On that day Dr. Johnson accidentally met with Dr. BALLINGALL, of Edinburgh, Dr. PICCHIOLI, of Florence, and Mr. GUTHRIE. To these gentlemen he related the melancholy case of his medical patient; and they having expressed a wish to see him, if yet alive, Dr. Johnson solicited them to visit the patient with him. They repaired to Mr. Cornish's house at ten o'clock at night, and found the patient nearly in the same state of distress as he was at three o'clock, when Mr. Lawrence and Dr. Johnson left him. The gentlemen above mentioned recognised the auscultic phenomena which have been already detailed, and, in consequence of a most urgent solicitation, not only from the patient, but from his sisters and several relations, Mr. Guthrie agreed, in deliberate consultation with Dr. Ballingall, Dr. Picchioli, Mr. Cooke, and Dr. Johnson, to perform the operation of paracentesis thoracis, as the only measure that offered even temporary relief from the dreadful state of suffocation to which the unfortunate patient was reduced. The danger of the case was not concealed from Mr. Cornish himself, nor from any of his friends; nor was any sanguine expectation held out of recovery, but only of relief. It was stated that the operation was neither painful nor dangerous, and that it afforded the only probable chance of life that remained. The patient and friends ardently urged the operation.

An incision was made in the anterior lateral part of the left side of the chest, between the sixth and seventh ribs, and the pleura cautiously opened with the scalpel. At that instant a rush of air issued forth, with a loud hissing noise, and strong enough to extinguish several candles, had they been near the orifice. The relief was almost instantaneous. The patient turned on his back, and breathed with comparative freedom, expressing the highest sense of gratitude for the operation. He was turned round on the left side, but no fluid came from the wound. A piece of linen was placed over the orifice, and the medical gentlemen retired. The relief continued for some hours, and then the difficulty of breathing returned to a certain extent.*

Wednesday, 31st.—Mr. Guthrie, Mr. Cooke, Dr. Johnson, and several others, visited the patient at half-past twelve o'clock, and found him labouring under a considerable degree of dyspnoea, though not near so much as before the operation. It was found, on examination, that the wound was

* On returning home, at midnight, Dr. Johnson wrote a note to Mr. Lawrence, apologising for the apparent breach of etiquette, and inviting Mr. L. to see the patient next morning, stating what had been done. Mr. Lawrence, however, was not able to attend on the following day.

closed. The left side sounded nearly as sonorous as ever, and the *tintement métallique* was perfectly audible. A director was introduced into the wound, and a rush of air instantly escaped, with immediate relief, as in the first operation. A probe-pointed bistoury was passed in, and the opening in the pleura extended to the size of half an inch. The pulse had fallen to 120, the countenance was good, skin moist, expectoration more copious, and mucopurulent. (On examination of the left side immediately after the escape of the air, no *tintement métallique* could be heard by any of the medical gentlemen. The patient took nourishment this day, and was seen by several medical practitioners. In the evening, when Dr. Johnson visited him, the patient was not so well, and a probe was again introduced, when air escaped with some noise. Twenty drops of laudanum were given in a saline draught, and the patient was left.

Thursday, Jan. 1st, 1829.—On visiting Mr. Cornish this day, the medical attendants were agreeably surprised to find that he had had several hours of tranquil sleep, and that for the first time during some weeks; that his breathing had been easy, the expectoration more copious, and inclining to purulency; the pulse reduced in frequency, and more expanded; the appetite good. He got out of bed this day without assistance, went to the commode, and had a natural motion. Mr. Lawrence saw the patient, and pronounced him greatly relieved. On examining the wound, a canula was pushed in, and a taper was held near it. During inspiration the canula was closed with the finger, so that no air could enter the chest; and during expiration the finger was removed from the canula, when a rush of air always escaped. This was continued until no doubt could remain as to the fact that part of the air drawn in by the mouth was thrown out of the wound at each expiration. This phenomenon, and especially the large quantity of air thus thrown out, proved that a considerable aperture of communication existed between the bronchia and the cavity of the pleura; a circumstance which greatly lessened the hopes of recovery. It was found that, since the operation, the apex of the heart beat about an inch and a half, or two inches, nearer the central line of the thorax than before. The pulsation was still, however, to the right of the line. The patient continued comfortable through the day; but Mr. Cooke was called up in the night, and found him greatly oppressed. The canula was re-introduced, and some relief followed, the wound being covered with a piece of gauze.

Friday, January 2, 1829.—It was but too evident this morning that the unfortunate patient was sinking. He had a strong convulsion early today, and about one o'clock he expired.

Post-mortem examination.—Mr. Cornish being of the Hebrew religion, great difficulties lay in the way of an examination post mortem; but the friends and relations of the deceased evinced much liberality, and leave was ultimately attained for dissection, though such a process was almost unprecedented among the Hebrew brethren. Previously to the examination, which was conducted by Dr. HONGKIN, and witnessed by a great number of medical men, Mr. C., a surgeon of the Hebrew religion, who had frequently visited the patient during his illness, demanded of Dr. Johnson what were the morbid appearances which he expected to find? Although this was a question which it would not be always very charitable to ask before a dissection, yet Dr. Johnson did not decline the answer, which was made in the presence not only of the above medical gentlemen, but of a number of the

patient's friends.* "The disease was pronounced to be pneumo-thorax; and the morbid appearances would be a collection of air and some other fluid in the left side of the chest; collapse of the corresponding lung; aperture in the lung, capable of giving free vent to air from the lung to the cavity of the pleura; displacement of the heart; probably tubercles in the right lung."

Dr. Hodgkin then opened the body. On raising the sternum, the heart was found rather to the right of the median line of the chest. The left lung was collapsed to one fifth of its natural dimensions. The vacant space was filled with air, and about fourteen ounces of turbid serous fluid. The pleura costalis and pulmonalis presented marks of inflammation of a few weeks' standing, viz. some thin false membranes, that were easily separated by scraping with the scalpel. There were no marks of any more recent pleuritis, even in the vicinity of the wound, there being only a slight ecchymosis between the pleura and subjacent cellular tissue, for the space of a few lines around the incision. A tube was inserted into the trachea, and air blown into the lungs. The left lung expanded to a certain extent, and air was heard to bubble out. The lung was then carefully removed, and an aperture was immediately recognised at the division or cleft between the two lobes. The tube was inserted into the bronchus leading to the left lung, and Dr. Johnson blew in air. It rushed forth at the aperture, and extinguished a taper that was held near it. The aperture itself was then more accurately examined. It was circular, and capable of admitting a crowquill. It was evidently fistulous, and of several weeks' standing. It was found to communicate with a very small excavation formed by the softening down of some tuberculous masses, and into this small excavation a bronchial tube was seen to enter. Thus the communication between the trachea and the cavity of the chest was distinctly traced through a bronchial ramification, a very small tubercular excavation situated on the very surface of the lung, and an aperture through the pleura pulmonalis. The left lung presented some trifling tuberculation, but was not materially diseased.

The right lung was much more tuberculated; but the tubercles were principally in a quiescent state. There was no other disease in the chest.

Dr. Hodgkin formally declared that every iota of the diagnosis was verified by dissection, and every individual present agreed in this declaration.

In this country there is but one other case on record where the operation was performed for pure pneumo-thorax; and the operation was successful.†

* We were present when this very trying, and we think unreasonable, question was proposed to Dr. Johnson, and heard the answer given, which the subsequent examination of the body proved to be perfectly correct; highly to the credit of Dr. Johnson's pathological skill.—EDITORS.

† Mr. KELLY has related a case of this disease, in the *Edinburgh Med. Comment.* vol. ii. p. 427, which was produced by a suppurated tubercle that formed an opening from the bronchia into the pleura. The inflation extended widely over the body. The symptoms became pressing, and it was determined, under the advice of Dr. MUNRO, to evacuate the air by an opening into the chest. An opening was consequently made through the pleura. Upon withdrawing the perforator, a blast of wind issued through the canula, which blew out a lighted candle three or four times. The patient was immediately much relieved. He recovered gradually, and in three weeks ate and slept well. He enjoyed a good state of health for nearly a year: at the end of that time he was again attacked with pulmonic disease, and he died hectic in a few weeks. Upon examination post mortem, Mr. Kelly found the lungs in a very diseased state with tubercles on the external surface of the right

The circumstances of the case, however, were different, and the diagnosis was infinitely more easy in the one than in the other. The case is recorded in the Philosophical Transactions for 1823, by Dr. DAVY.—*Med. Gazette.*

History of a Case of Inflammation of the left Spermatic Vein, and Sinuses of the Uterus; with the Appearances on Dissection. By ROBERT LEE, M.D. &c. Physician to the British Lying-in Hospital.

September 21st, 1827.—Mrs. Somerville, æt. forty, was delivered of her seventh child on the 18th instant, after a natural labour of three hours' duration. Yesterday afternoon she was attacked with a severe rigor, which was speedily followed by acute pain in the hypogastrium and loins, suppression of the lochia, nausea, urgent thirst, and increased heat of skin. In the evening she was delirious, and slightly comatose.

She is now roused with difficulty, and makes no complaint but of pain in the left iliac region. The abdomen is unusually distended, but neither hard nor tense, and pressure produces no uneasiness except between the left ileum and umbilicus. The uterus can still be felt above the brim of the pelvis, large and hard, and very painful on pressure. The milk and lochial discharge are suppressed. The countenance is pale and anxious, respiration hurried; pulse 130, weak and intermitting; tongue white and moist; bowels have been opened by castor oil.

A vein was opened in the arm, but only ten ounces of blood could be procured. Twenty leeches were applied to the hypogastrium, and calomel and antimonial powder were administered every four hours.

During the 22d, the stupor continued to increase, the abdomen was much more distended and painful; the respiration more hurried and laborious; and the pulse extremely quick, feeble, and intermitting. She became completely comatose in the evening, and died on the morning of the 23d.

Dissection.—The intestines were slightly distended with gas, but there was no trace of inflammation on any part of their peritoneal surface, and no fluid effused into the sac of the peritoneum. On turning aside the intestines, the left spermatic vein, from the uterus to its junction with the left emulgent vein, was seen distended to nearly the size of the vena cava itself. The cellular membrane surrounding it was highly vascular, and adhered closely to its external coat. On laying open the vein, a dark coloured, firm coagulum of blood filled it throughout its whole course, but did not adhere to its internal surface, except near its termination, where it was lined with a layer of lymph. The coats of the vein were thicker and firmer than usual, and the internal membrane was of a bright scarlet colour; as was that lining the veins of the uterus, near the fundus on the left side, the part to which the placenta had been attached. The substance of the uterus in this situation was of a dark livid colour, remarkably soft in its texture, and easily torn with the fingers. The corresponding ovary and fallopian tube was also very soft, and of a dark red colour, and shreds of coagulable lymph adhered loosely to their surface. The left renal vein was in the same state as the spermatic, and the substance of the left kidney was soft and vascular. In other respects the abdominal

lobe. There was extensive adhesion to the pleura, particularly at the place where the pain had been most felt before the operation. An abscess was found in the right lobe, which contained about four ounces of fetid purulent matter.—EDITORS.

viscera were in a healthy state, and nothing unusual was perceived in those of the thorax. The brain was not examined.

The preceding case, with four others of a similarly malignant character, came under my observation in the two last weeks of September, 1827. As all the individuals so attacked had been attended during labour by the same midwife, and as no example of any febrile or inflammatory complaint of a serious nature occurred among the other patients of the extensive institution under my charge, during the period above mentioned, I was led to conclude that the disease was propagated by contagion.

Inflammation of the veins of the uterus after parturition, has been described by several pathologists;* but the circumstance of the inflammation extending along the continuous membrane of these and the spermatic and renal veins, to the vena cava, has scarcely been noticed,† although it would not appear to be an uncommon occurrence. Dr. D. DAVIS possesses a preparation, exhibiting the left spermatic and renal veins obstructed with coagulable lymph, which he informed me was taken from a patient who died of puerperal fever a few days after delivery.

Dr. CARSEWELL, to whom I mentioned the case of Mrs. Somerville, recollects having seen in Paris similar examples of inflammation of the spermatic veins in patients who had fallen victims to puerperal peritonitis. He informed me also that he had occasionally found in the spermatic veins of females advanced in life, concretions and disorganizations of various kinds, obviously the products of inflammation at some remote antecedent periods.—*Ibid.*

SURGERY.

Phlegmonous Erysipelas cured by Compression.—CASE I. A woman, sixty-five years old, was admitted into the Hospice de l'Ecole, in the last stage of decrepitude. Her leg was swollen, painful, and of a brownish red colour. The pain was increased by pressure, but the colour remained the same. The subcutaneous cellular tissue had a boggy feel. The knee was also much swollen, and there appeared to be a small quantity of fluid in the joint. The inflammation soon extended to the thigh, and there assumed the same character. That the case was one of phlegmonous erysipelas, could not be doubted: the condition of the patient, however, precluded the possibility of abstracting blood with any degree of safety. Compression of the whole limb was ordered, and applied in a very careful manner. Whenever the bandage became loose, it was again applied. By this treatment at first some pain was given, but it quickly subsided, and the extensive inflammation soon terminated by resolution, from the effects of pressure alone.

The state and age of the patient rendered it very probable that gangrene of the affected parts would take place.

CASE II.—A man, sixty-five years of age, was attacked with phlegmonous erysipelas of both legs. They were swollen to an enormous size, and the skin was so tense that it was apprehended it would burst. The colour at the surface was a reddish brown, which did not disappear on pressure. The pain was severe. As the patient appeared to be of an apoplectic diathesis, he was

* Dr. J. CLARKE's Practical Essays on Pregnancy, &c. pages 63, 72.

† Mr. WILSON, in the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, vol. iii. page 65.

twice bled, but no effect was produced upon the inflammatory affection. Pressure was applied by means of bandages, and in six days the parts were restored to a natural appearance.—*Clinique des Hôp.*

Fracture of the Neck of the Thigh-bone.—Mr. LIZARS remarks, in his description of the bones of the lower extremity, that he has been informed, by Professor DZONDI, that he has seen several instances of bony union of the neck of the os femoris when fractured within the joint.

Description of a Case of Fungus Hæmatodes. By G. MACPHERSON, Esq.—Many years have elapsed since the disease to which I beg to call the attention of the Society was first accurately described by Mr. J. Burns, of Glasgow, and received from him the name of *spongoid inflammation*, but since the publication on the same subject by Messrs. Hey, Freer, and Wardrop, more generally known by that of *fungus hæmatodes*.

It has been known to attack almost every part of the body; but, so far as I am aware, there are no sure indications from which we can at first ascertain its real nature, except when it occurs in the eye, as the small tumor with which it has been observed to commence in other parts assumes no peculiar form until of some standing, when it has a fluctuating feel, points irregularly at several places, and the surrounding parts become of a deep red colour. The tumor now conveys the idea, from the undulating feel, that it contains matter; and if by mistake cut into, or allowed to take its course and burst, a serous bloody matter is discharged, and soon after a soft, bluish fungus protrudes, which increases very rapidly, and bleeds profusely from the slightest accident; a fluid of a peculiar but most disagreeable odour is discharged, the neighbouring glands swell, and other parts become affected; and ere long, from the discharge and irritation on the constitution, death puts a period to the unfortunate individual's sufferings. The only disease with which it is likely to be mistaken is cancer, and happily the same treatment applies to both: however, there are symptoms by attention to which the two can be readily distinguished. Fungus hæmatodes generally attacks children under twelve years of age. The tumor, before the ulcerative process takes place, has a circumscribed, equal, elastic feel; when it ulcerates, its substance is soft and brain-like, and the fungus shoots out, which increases daily, and never diminishes by ulceration. Cancer, on the contrary, is most commonly met with in subjects advanced in life. The tumor is hard, firm, and inelastic; it is not unfrequently so much diminished by ulceration, and assumes such a deceitful appearance, that one unacquainted with the nature of the disease might be led to hope that it was about to cicatrize.

After the appearance of the fungus, when the character of the complaint is fairly developed, the only hope that remains of preserving life is by attempting to eradicate the disease with the knife; but, from the circumstance of the pain and inconvenience not being excessive at this stage of the disorder, it is with difficulty that the patient, if an adult, or the parent of a child, can be convinced of the immediate necessity of having the mass extirpated, or the limb amputated, and they are naturally very anxious first to try the effect of palliative measures. It, however, becomes the imperative duty of the medical attendant to use every endeavour and persuasion in his power to induce a

submission to the operation, at the only time its performance is likely to be attended with success; for it is a melancholy fact that there is no chance of any amendment taking place, either spontaneously or from the use of remedies; and there are but few instances on record where cures have been the result of operations, if not had recourse to at an early stage of the disease.

I have now the honour of submitting to the Society particulars of the only case of fungus hæmatodes of the eye that has come under my observation in this country, which I think will be considered interesting, as the result has been so much more favorable than was to be expected, from the circumstance of the organ not having been extirpated till the disease had proceeded so far as to render the chance of success nearly hopeless.

On the 15th of July, 1825, a boy named Toofauny, about three years of age, was brought to me with fungus hæmatodes of the eye, in a very advanced stage of the disease. His mother, who accompanied him, informed me that neither herself nor her husband were aware that any thing serious ailed the child, (although he was very fretful, and sometimes feverish,) until the middle of March last, when they accidentally discovered that he had lost the sight of his left eye, and then they were led to examine it; but all that they or their neighbours could observe was a slight inflammation, of which the other appeared to be free. A Kubraj, or village native doctor, was sent for, who stated that the inflammation was occasioned by some sand having got into the eye, which he extracted, or pretended to extract, and then took his departure, assuring them that the child would recover his eyesight in the course of two or three days. Some weeks subsequent to this, the child complained of violent pains in his head; had very disturbed sleep, from which he frequently awoke with a scream; his appetite was very uncertain, some days hardly tasting his food, and at other times being almost insatiable.

These symptoms continued, with little variation, for nearly a month; and, according to the woman's account, the diseased eye, although it became internally of a yellowish colour, neither assumed any irregular figure nor protruded from the orbit, until a few days before it burst, when it became much enlarged, and of a blackish hue. The relief which the poor little sufferer experienced from the bursting of the organ was so great and so immediate, that the parents were led to entertain sanguine hopes that now all bad symptoms would disappear; and these hopes were for some days strengthened by the following circumstances: he complained of no pain in the head, and of very little in the eye; his appetite became more regular, and he seemed to relish his food; he slept soundly, although only for short periods, and awoke apparently refreshed. These delusive appearances, however, were of but short continuance, as the fungus began to protrude beyond the orbit about the middle of the month of May, and a day or two afterwards bled so profusely from a very slight accident, as to cause the greatest alarm to the parents. It continued daily to increase, and occasionally to bleed, from this period till the 10th July, when they despaired of the child's recovering; but, as a last recourse, determined on bringing him to a medical man; a mode of conduct which, it may not be amiss here to remark, is too frequently adopted by the natives of this country.

When brought to me, the poor boy presented as unseemly an appearance as I had ever witnessed. The left cheek was nearly covered with the fungus, which was of a globular form. One side had a blue tinge, while the other was

of a dark red colour. It adhered to both eyelids, excepting for a small distance at the external angle of the superior one. He was so weakened and emaciated as to be unable to sit up without support. He seldom spoke, but whined and cried much. The light seemed to give him great annoyance: his head was therefore kept covered with a cloth, both to exclude it and keep the flies off, which were very troublesome. The glands about the parotid and under the jaw were swollen, but the integuments not at all discoloured; and he experienced little or no pain from pressure being made on them.

It was evident that death must soon ensue, if something were not speedily done. I was consequently induced to recommend the extirpation of the eye, although I confess my expectations of its being of service were any thing but sanguine. I explained to the mother that the disease had been allowed to proceed to such a pitch, that there was scarcely a hope of the operation being attended with success, but that it was the only chance there remained of preserving the life of her son. The poor woman was convinced of the urgency of the case; I therefore determined on operating the succeeding morning.

I commenced the operation at the outer angle, where the tumor did not adhere to the palpebræ; but, as they were both diseased, I thought it advisable to remove them along with the fungus, instead of first destroying the adhesions, then extirpating the eye, and afterwards cutting away the lids. On making my first incision, an alarming hemorrhage took place, when the child fainted, which had the effect of checking the bleeding, and the rest of the operation was got through with a common scalpel in two or three minutes, without any occurrence worthy of remark. The inside of the orbit was now carefully examined, and every thing of a suspicious appearance removed with the knife. The bleeding was very trifling. I therefore thought it unnecessary to fill the orbit with lint, as is usually done, and merely applied a compress and bandage. An anodyne draught was now given, from the effects of which he slept nearly twelve hours.

17th July, nine A.M.—Complains very much of vertigo and pain in his head. Has had no stool since yesterday morning. *Habeat Pulveris Jalapæ gr. x.; Submuriatis Hydrargyri gr. iij. stat. sumend.*

Four P.M.—No stool; symptoms much the same; excruciating pain in the head.—Loosened the bandage. *Injiciantur quamprimum per anum enematis domestici unciz octo.*

Nine P.M.—Has had two fetid and dark-coloured stools. Pain in the head less severe.—*Repetatur Pulvis.*

18th.—Two copious but very fetid evacuations during the pain: pain in the head much relieved; countenance more lively; pulse quick; tongue foul, and surface rather heated; no inclination for food.—*Repetatur Pulvis.*

19th.—Passed a good night. Has had three copious stools since yesterday, of a more healthy appearance. Pain in the head almost gone; pulse calm; tongue cleaner; and surface moist and cool.—*Vespere repetatur Pulvis.*

20th.—Much improved in appearance. Bowels well opened; headach and all febrile symptoms gone. Took some boiled rice and milk, which he seemed to relish much.

From this period I commenced giving him small doses of bark, two or three times a day, taking care to keep his bowels rather loose. This practice was attended with the most beneficial effects, as his health and strength daily increased, and the wound occasioned by the removal of the tumor healed kindly

by granulations in less than three weeks ; after which, he and his mother left this for their home, with a supply of bark, and some purgative powders to be given occasionally.

I saw the boy last April, nine months subsequent to the operation, when he was in perfect health. The swollen glands had not at all increased in size ; neither had he felt any pain in the orbit since he left this. I have not seen him since ; but my native doctor tells me he had a severe fever last month, from which he recovered, and was, when he last heard, quite well.

The fungus (which I now send) weighed, the day after it was extracted, seven ounces, five drachms, one scruple ; and was so soft and pulpy, that I was under the necessity of steeping it in acid, with a view to harden and preserve it.—*Trans. of the Med. and Phys. Society of Calcutta.*

INTELLIGENCE.

MONTHLY REPORT OF PREVALENT DISEASES.

HOOPING cough, scarlet fever, and bronchial inflammation, have been very prevalent, and more than commonly severe, amongst children. Measles have also been frequent.

Two cases of hooping-cough have proved fatal within our knowledge. In each the bowels were obstinately constipated, notwithstanding the free use of purgative remedies, and in each symptoms of great cerebral disturbance suddenly occurred. The infants soon became comatose, and died. Upon examination after death, the ventricles of the brain were found to contain, in one case, about an ounce, and in the other an ounce and a half, of fluid. Several instances of mild scarlatina have been followed by anasarca of the extremities and considerable general debility. Mild purgatives, diuretics, and light tonics quickly relieved these patients.

Although we have had abundant opportunities of seeing rheumatism in all its forms, we do not remember a case similar to the following :

A healthy man, a farrier by trade, after exposure to cold, was attacked with slight rheumatic fever. His arms at first suffered, and very severely. The pains and superficial inflammation then left the arms, and settled in the legs. The left testicle then became very painful : it was considerably enlarged, and very hot to the touch ; the surface of the scrotum smooth and red. The patient was now free from pain in every other part. He had hitherto considered the attack to be too trifling to require medical treatment, but he now applied for our advice. He was directed to remain quiet, to apply leeches to the scrotum, and afterwards tepid lotions. The bowels were freely opened. In two days the testicle was no longer painful, and but slightly enlarged. The appearance of the scrotum was nearly natural. He now suffered much from pain in the ankles and forearms, both of which parts were swollen and inflamed. Tepid lotions of spirits of wine and camphor mixture were directed to be constantly applied to the affected parts. The Vinum Sem. Colchici was given three times a day, in doses of thirty minims, and an anodyne at bedtime. In three days he was perfectly well, and has since remained free from any other complaint than a slight tenderness of the testicle. He had not had gonorrhœa for several years.

College of Physicians.—The second meeting of the season took place on Monday evening, and was numerously attended. A paper by Dr. HOLLAND, entitled "Remarks on the Use of Sudorific Medicines," was read. The object of this paper is to draw attention to the principles upon which internal sudorific remedies are employed, and to suggest some observations calculated to render more explicit our views as to their nature and operation. After remarking on the great uncertainty of effect attending the use of this class of remedies, even in cases where natural sweating is a symptom habitually present in the progress of the disease, and upon the difficulty of discriminating as to the effects of different medicines of the class, Dr. H. proceeds to examine the principles upon which the use of sudorifics has chiefly been founded. A principal one appears to be the fact of the suspension of various morbid actions in sequel to natural sweating, as witnessed in the simple paroxysms of fever, in many of the phlegmasiæ, &c. Though this analogy is plausible, however, yet it is open to many doubts. Various considerations are stated by the author, justifying these doubts; and he infers that, in the present state of our knowledge, it is more correct in principle, and safer in practice, to consider the sweating stage, or critical sweat, as one of the series of changes constituting fever, than as the efficient cause of the subsidence of the paroxysm; rather as an index of the changes occurring in the vascular system, than as the agent in producing such changes. In reference to the same argument, he recites some of the many instances of natural perspiration, under states of disease, without relief, or often with aggravation of danger to the patient.

In the succeeding part of the paper, Dr. H. considers particular sudorific remedies upon the general principles before laid down; doubting altogether the efficacy of many medicines so classed, and attributing the probable influences of others, as of the antimonials, chiefly to their effect upon the circulation, and in diminishing febrile action. He considers their employment in practice will generally be more successful in proportion as this principle is kept in view. He expresses his concurrence with the opinion of FREIND as to the superior advantages of opium over most other diaphoretics; and makes some remarks on the diminished and less effectual use of opiates in modern practice.

After some further observations on bloodletting, diluents, &c. as affecting the action of the capillaries of the skin, Dr. H. concludes his paper by the following general deductions as to the use of sudorifics: 1st. That it is for the most part more expedient in practice to have regard to the changes in the vascular system producing diaphoresis, than to the action of sweating itself; 2d, that the amount of perspiration is seldom a measure of the benefit obtained; and 3dly, that to make this a criterion, or primary object, is likely often to give a wrong bias to the treatment of disease.

Climate of the Azores.—The learned President read a letter from a correspondent, in which he spoke very favorably of the climate of the Azores for invalids, especially those labouring under consumption, a complaint which he stated to be very uncommon in these islands. The maximum temperature during the year is about eighty-four, the minimum about forty-eight, of Fahrenheit. The writer gave an account of some hot springs, from which baths are made, enjoying high repute; and of various mineral waters, some of which are chalybeate, others contain a large quantity of free carbonic acid, and yet others are merely saline.

A Compendium of the Introductory Lecture of J. G. GUTHRIE, Esq. F.R.S. delivered before the Royal College of Surgeons, the 11th of March, 1829.

A considerable time before the commencement of the Lecture, the theatre was crowded to excess, and many members were unable to obtain admission. Precisely at four o'clock, the College dignitaries, the council, and the select visitors, presented themselves, and occupied the exclusive seats. The Professor immediately followed, and expressed himself to the following effect:

In accepting the honour which the council have conferred upon me, by appointing me their Professor of Anatomy and Surgery, I have to express my grateful feelings for their kindness, and to beg their indulgence towards the efforts I am about to make. I am fully aware of the magnitude and importance of the office which I undertake; an office which implies the imparting of knowledge to so learned a community as that I now address. The council, aware of the constant, though gradual, progression of anatomical and surgical knowledge, as well as of the proneness of individuals to adopt and pertinaciously adhere to favorite theories and speculations, have formed the wise regulation of appointing their professors for limited periods. In lectures directed to a body of men so distinguished for originality of conception and soundness of judgment as the Royal College of Surgeons, it is not enough to describe the processes of bones, the origins and insertions of muscles, the course and relative position of blood-vessels, nerves, and absorbents: these are the mere elementary parts of the science. A novelty of doctrine is necessary to fix the attention, to rouse into action the speculative powers of original minds, by presenting a perpetual series of new experiments, and consequent inferences. If professors were appointed for life, these results would not accrue: the limited extent of the human faculties, in a single individual, could, for so long a period, afford little more than an exposition of principles already demonstrated, and universally acknowledged. I need scarcely say, gentlemen, that such a mode of proceeding could not be suffered by this enlightened College.

The numerous truths which have of late years been elicited in anatomy and surgery, give an appearance of fallacy to their principles, which the exact sciences are not subject to: the seemingly well-established axioms of one age become, through the accumulation of facts, merged in the still more general laws of the next, and these again become involved in future generalizations. I ascribe my own appointment to this chair, in part to my standing in the College, and in part to the partiality of the council. I do not shrink from the responsibility incurred by the acceptance of this office; and I shall endeavour to inculcate on your minds the importance of the study of human anatomy and surgery, which will form the subjects of my future lectures. The progress which these sciences have hitherto made is ascribable to the aggregation of knowledge; the force of individual exertion is feeble indeed; and when considered in relation to the vast domain of nature, is calculated to teach a lesson of humility, to convey an impressive idea of the nothingness of man, compared with the universal development of the supreme Power. Some rare examples of sublime genius have from time to time appeared, and have earned for themselves an immortality of fame, whose achievements in science throw into the shade the aggregate transactions of an age. The rare genius and uncommon industry of John Hunter projected and accomplished the formation of a museum, which is now an ornament to the walls of this College, and a noble monument of its illustrious author.

am happy it is the determination of the council to follow in the track of this great man, and to devote a portion of the funds which have for years been silently accumulating, to the cultivation and diffusion of anatomical and surgical knowledge.

The structure of man is perfect: nothing can be added to, or altered in, the constitution of his frame, without deterioration; nothing can be taken away, where there is no superfluity. Such is the beautiful mechanism of the human body, that a closer study of its various movements would contribute to the improvement of mechanics in general. In man are contained the rudiments of all organs of other animals. Those organs which in man are small, and hardly developed, are in some animals more perfect, and perform an evident function; and organs which can scarcely be detected in one class of animals perform an important part in the functions of another: thus it is that the comparative examination of the subjects of the animal kingdom tends to illustrate the functions of the whole.

Any observations in explanation of the influence of the knowledge of anatomy, or physiology and pathology, would justly be considered trite. With respect to the infliction of experiments on minor animals, for the purposes of physiological investigation, I do not see any great objection, provided such experiments are performed with determinate views and a rational purpose. It ill becomes those who destroy thousands of those animals which they have for months nurtured and caressed, for the purpose of ministering to the grosser appetites, to carp at physiological experimentalists, whose efforts are directed to the noblest ends. I have myself never performed any experiments on living animals; I have always been influenced by the feeling so finely expressed by the poet.

Those experiments which I have directed to be performed were indispensable to the acquisition of certain facts, and conducted with the greatest possible humanity.

The Lecturer, who had hitherto read his communication, now closed his book, and thus addressed the president:

Sir,—I beg to address you, as Professor of Surgery to this College; as professor of an art which does not hold so high a rank in society as it merits, or so high as that it attained amongst the ancients. For its early history I shall refer you to the song of that immortal bard and poet, with whom we are made familiar even in boyhood; that sublime poet, whose influence, after a lapse of some thousand years, of late induced Europe not only to draw the sword, but (what is more extraordinary) to draw the purse-strings, in favor of his unhappy country Greece. It is Homer who relates that, when a pestilence appeared in the Grecian army before Troy, the infected persons were directed to apply to the priest of Apollo. But when Machaon, one of the chiefs of the army, and himself a surgeon, was wounded, he was taken to the camp, that he might be attended by those skilled in dressing wounds. The anxiety entertained in the public mind respecting him was not occasioned so much by his rank as a prince, or his talents as a leader, as by his skill as a surgeon. In those days surgery was practised by princes and philosophers.

I beg to refer you also to the Augustan age, when a surgeon was appointed to each legion, and styled *Medicus Vulnerarius*. These officers were held in high honour: they were exempted from taxes, made citizens of Rome (a distinction coveted by, and often refused to, crowned heads,) and distinguished

by gold rings, as having the rank of Equites. It is evident from these facts that the distinction between medicine and surgery did not formerly exist. In the time of Hippocrates, 400 years before Christ, the three branches were frequently practised by one individual. In the fourth century, the irruption of the Goths and Vandals involved in the general waste all vestiges of the art of surgery in the western world; and the destruction of the Alexandrian library by the Saracens completed its fall in the east. In Europe during the dark ages the practice of medicine and surgery was confined to ecclesiastics. The surgical part was most frequently performed by their servants. The priests were prevented by the canons of their church from practising surgery, and superstition amongst the Mahomedans led to a similar degradation of the art in that community. The wars of the Saracens, however, soon taught them the necessity of cultivating surgery; and we accordingly find that, while Europe was involved in intellectual darkness, many bright names flourished amongst the Arabians. In Christendom, where war likewise gave an impetus to the study, a distinction arose amongst the medical men of Ministri Honorati, who performed the part of physicians, and the Ministri Servileæ, or barber surgeons. At a council held at Tours in 1163, it was declared improper for an ecclesiastic to perform any operation on the naked human body; and two bulls were issued by two several popes in the eleventh century, to a similar purpose. At this period surgery was certainly at its lowest ebb.

In 1168, Jean Pitard, who may justly be considered the greatest benefactor to surgery in modern times, was the first to raise the art from its degraded condition. Although of humble birth, he raised himself to the rank of personal surgeon to St. Louis, whom he accompanied in his disastrous crusades, and whose friend and counsellor he afterwards became. On his return from Egypt with his master, he employed the influence which he possessed over the royal mind, not in contributing to his own aggrandizement, but in raising the character of the profession. He induced the king to establish an academy of surgery at Paris, and to appoint professors, who were invested with powers to examine all persons aspiring to the rank of surgeon.

William Vavasour, physician to Francis I., next to Pitard deserves our respect. By his interest with the king, he procured the elevation of the academy of surgery to the dignity of a university; and he himself was a most distinguished and scientific practitioner.

In 1615, the less eminent practitioners who were dispersed through the provincial towns, and could not, of necessity, be members of the university, conspired against that institution, and procured a royal edict for their association with it.

In 1731, a sacred band of surgeons offered a firm resistance to the degradation of the surgical profession, and succeeded in reestablishing the academy, and thus contributed to remedy the ills occasioned by the inundation of the barber surgeons.

I have not yet noticed the progress of surgery in this country. It is well known to those read in history, that during this period all physicians and surgeons were imported from the continent. As there were no schools on this island, our youths were obliged to resort to Paris, and other foreign academies. But, although there were no schools of surgery in this kingdom, many great surgeons flourished amongst us. Wiseman, serjeant chirurgion to Charles II., is a writer whose work may be consulted with advantage even

now; the great Cheselden was at twenty-two years of age a teacher, and at twenty-five published his celebrated work. So great was his reputation, that the French academy sent over Morand, their secretary, to observe and report upon his method of operating.

In 1745, the corporation of surgeons was established, and have since that period been actively engaged in the cultivation of anatomy and surgery. No institution could do more for the advancement of the professional character than this has done; and, without a doubt, it will raise the name of surgeon to as great consideration as it has ever enjoyed, provided the barriers and trenches which protect its high offices are not removed. Should this unfortunately occur, it would take a century to repair the mischief that would ensue, and to restore the surgeon to his pristine respectability. Not that I would exclude any man *absolutely* from any situation in the College; but certain qualifications and conditions are necessary, to preserve the consideration of the world.

This consideration will not be obtained unless, like the professors of the law, the professors of physic and surgery show themselves competent to think and speak on other subjects besides those immediately connected with their profession. I know not what ban is set upon them to prevent it. I would have the medical profession represented in Parliament. We see that tradesmen of all classes have efficient representatives in the great council of the nation, who decide on all questions affecting the weal of the nation, and even feel themselves fully competent to determine upon the propriety and necessity of anatomical dissections; while not a single surgeon or physician, of all those whose wealth, abilities, and character qualify them for the task, is found to defend the interests of the medical body in that high assembly. From whence does this arise? Is all ambition withered within us? Are there not men among us with the same desires, the same views and energies, that urge forward the members of every other class or profession? or are our numbers, importance, and rank in society not sufficient to entitle us to consideration, and to warrant the assertion of our claims? I trust our remaining stationary is not to be attributed, as we have been accused, to a desire of accumulating money; but that we can love honour, as much as wealth, and are as capable of exertions for the one as the other. I see around me many who have just completed their studies, and are entering upon the duties of the profession. I would anxiously urge them, not only to the active exercise of these duties, but also to the acquirement of scientific attainments in every branch of knowledge; for it is by such studies that the profession will be advanced in the estimation of the world; and, by labour thus directed, they may be enabled proudly to assert their right to rank, if not as the first, at least as the equal, of all other learned professions; and if ambition be necessary to urge them forward, let them ask themselves what bars their way to honours, more than that of any other profession? The answer is, Nothing; the road lies before you.

I beg I may not be misunderstood. It is not every man who has a few thousand pounds in his pocket that ought to think himself competent to stand forward as the champion of the profession. No: sixty winters must have shed its hoar on his locks who should attempt it. He must have long enjoyed the suffrages of that profession, and have acquired an independent fortune. Cannot one man be found in each of its branches of physic and surgery, who answers to this description. I can, sir, almost lay my hand upon them both.

I will not detain you, gentlemen, any longer on this subject; but if I have been happy enough, in the course of these observations, to raise the ambition, or spur on to more active exertions, a single individual, I shall rest satisfied that these introductory remarks have not been made in vain.

Throughout the above eloquent discourse, Mr. GUTHRIE evinces his characteristic ardour for the honour and advancement of the profession. He very judiciously urges all who are cultivating their professional studies to extend their inquiries to those other accomplishments which men of liberal education are expected to possess. The public in general must form an estimate of medical talent, of which they can rarely be competent judges, by proofs of knowledge upon subjects of which they are, or at least fancy they are, capable of forming an opinion. He who is really a zealous student need not fear to step beyond the pale of professional information. Occasional relaxation is necessary to every mind, and may always be obtained by a judicious alternation of study.

The general character of the lectures which Mr. Guthrie has as yet delivered at the College may be conveyed in a few words: They prove him to possess a very acute and active mind. He conceives his subject clearly, and arranges it perspicuously. His language is correct and vigorous. In medical discussions, we have often listened to Mr. Guthrie with much pleasure as a public speaker, but it was yet to be seen how he would acquit himself before so large a body of his peers in the responsible character of Professor. He has certainly passed the ordeal with the highest credit to himself.

Mr. MAYO next takes the professorial chair, and Mr. Guthrie afterwards delivers a course of surgical lectures.

New Regulations with regard to Medical Degrees.

Cambridge, March 6.—The candidates for the degree of M.B., in addition to the examination of the Regius Professor of Physic, to be examined by the Professors of Anatomy, Chemistry, and Botany, each in his own science, previously to the performance of the public exercises in the schools; and that every candidate attend at least one course of lectures on each of the above subjects. He may offer himself for examination any time during his fifth year from admission, but not earlier. That no person be admitted to pass to the degree of Bachelor of Medicine, without having been admitted to any college, who after this date shall, during the time of his being in *statu pupillari*, have been engaged in the practice of pharmacy or midwifery, or in any trade whatever.

MONTHLY LIST OF MEDICAL BOOKS.

[Medical Works cannot be entered on this List except a copy be sent for the purpose; the titles of Books having frequently been transmitted to us, as published, which have not appeared for weeks, or even months, after.]

Illustrations of the Diseases of the Breast. By Sir ASTLEY COOPER, Bart. F.R.S. Serjeant Surgeon to His Majesty; Consulting Surgeon of Guy's Hospital; Lecturer on Anatomy and Surgery, &c. In two Parts. Part I. Coloured Plates.—4to. pp. 89. London, 1829.

A Treatise on Obstructed and Inflamed Hernia, and on Mechanical Obstructions of the Bowels internally; and also an Appendix containing a brief Statement of the Cause of Difference in Size in the Male and Female Bladder. By HENRY STEPHENS, Surgeon.—8vo. pp. 190. London, 1829.

Letters on the Study and Practice of Medicine and Surgery, and on Topics connected with the Medical Profession. Addressed to Students, young Practitioners, and Parents and Guardians. By JAMES WALLACE, Assistant Surgeon, R.N.; Author of "A Voyage to India, &c."—8vo. pp. 210. Glasgow, 1828.

These Letters contain many useful hints for students, and for those who preside over the education of youths destined for the profession.

Medical Botany, No. 27, for March. By JOHN STEPHENSON, M.D. and JAMES MORRIS CHURCHILL, F.L.S. &c.

In this Number very elegant plates and correct descriptions are given of the *Curcuma Zedoaria*, the *Fucus vesiculosus*, and the *Aloe vulgaris*.

Annali Universali di Medicina. Fasc. di Gennajo, 1829.—Milano.

A Preliminary Dissertation, illustrative of a new System of Pulmonary Pathology; combining a rational Theory, with a successful Method of conducting the Cure of Consumption. By P. P. P. MYDDELTON, M.D. &c.—Bath, 1825.

METEOROLOGICAL JOURNAL,

By Messrs. HARRIS and Co. Mathematical Instrument Makers, 50, High Holborn.

February	Rain gauge.	Moon.	Thermom.			Barometer.		De Luc's Hygrom.		Winds.		Atmospheric Variations.		
			9 A.M.	MAX.	MIN.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 a.m.	2 p.m.	10 p.m.
20			44	49	39	29.50	29.46	65	67	WSW	SW	Foggy	Fine	Fine
21			42	50	40	.11	.03	68	66	SSE	S	Rain	Cloudy	Cloudy
22	.08		42	46	37	.14	.25	66	65	SE	SE	Cloudy	Sleet	Cloudy
23			37	40	34	.41	.42	64	63	E	E	Fine	Fine	Fine
24			36	40	35	.33	.42	62	67	E	ENE	Fine	Fine	Fine
25			38	42	36	.76	.93	69	72	E	E	St. Fog	Fine	Cloudy
26			39	41	39	.90	.86	74	69	E	ESE	Foggy	Fine	Rain
27	.04		41	41	38	.98	30.17	69	67	ENE	ESE	Foggy	Show'ry	Fine
28	.02		34	40	27	30.24	.18	66	66	SE	SE	Fine	Fine	Fine
Mar.														
1			32	38	32	.12	.04	65	65	SE	ENE	—	—	—
2			34	36	33	.01	.12	64	65	ENE	NE	Foggy	—	Cloudy
3			36	40	36	.21	.18	65	66	ENE	NE	St. Fog	—	Cloudy
4			40	42	33	.02	.06	68	65	ENE	ENE	Rain	Cloudy	Fine
5	.06	●	37	43	37	.08	.04	63	64	ENE	ENE	Foggy	Fine	Cloudy
6			41	45	39	29.94	29.87	64	65	NE	E	Foggy	Fine	Fine
7			40	44	38	.84	.87	65	65	ENE	NE	—	Fine	Cloudy
8			39	47	37	.80	.73	65	65	NW	NW	Fine	Cloudy	—
9			40	45	36	.76	.67	65	62	NW	N	Fog	Fine	Fine
10			39	45	33	.72	.74	62	62	N	E	Fine	—	—
11			38	42	34	.70	.68	62	60	E	E	—	—	—
12			37	41	35	.62	.56	60	60	E	E	—	—	—
13			39	43	35	.51	.64	60	65	ENE	NE	—	—	Cloudy
14			39	43	31	.70	.74	55	55	NE	NNW	—	—	Fine
15			34	42	29	.71	.69	54	54	NE	NE	—	—	—
16			36	40	29	.64	.51	54	53	NE	ESE	Fog	—	—
17			39	45	33	.36	.38	53	57	FSE	SW	—	—	Cloudy
18			45	54	45	.58	.60	57	53	S	S	—	—	Rain
19	.06		57	59	51	.61	.36	52	55	S	S	Fine	—	Fine

The quantity of Rain fallen in the month of February, was 0 inch 26-100ths.

NOTICES.

The Editors have not received a copy of Dr. LOUDON's work.

Communications have been received from Mr. MARSHALL, Mr. BARCOME, of Demerara, (through Dr. JAMES JOHNSON,) Mr. JEWEL, R.N., Mr. BURNETT, and Mr. GREEN.

The suggestions of our Correspondent upon the treatment of "Varicose Veins" shall appear in our next Number.

ERRATUM in the last Number. P. 244, five lines from top of the page, for "naturally" read "materially."

For the Bodleian Library

THE LONDON
Medical and Physical Journal.

NO 363, VOL. LXI.]

MAY, 1829.

[NO 35, *New Series*.]

For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work, to which the Faculty, in Europe and America, were under deeper obligations than to the *Medical and Physical Journal of London*, now forming a long, but an invaluable series.—RUSH.

ORIGINAL PAPERS, AND CASES,
OBTAINED FROM PUBLIC INSTITUTIONS AND OTHER
AUTHENTIC SOURCES.

UTERINE LEUCORRHOEA.

On the Use of the Ergot of Rye in Uterine Leucorrhœa. By
MARSHALL HALL, M.D. F.R.S.E. &c. (In a Letter to JOHN
NORTH, Esq.)

THE bearer of this communication is the patient whom I promised to send to you, and whose case was promptly relieved by the ergot of rye. She will herself describe the truly deplorable state in which she had long been, before she began the use of this remedy; but I believe the following particulars, which I transcribe from my notes, will be found accurately to coincide with the account she will give you.

From August 1824, after a protracted labour, to September, she became subject to profuse menorrhagic discharges, during which large coagula of blood were continually expelled; and after which there was the most profuse leucorrhœa. She became, of course, as blanched, thin, and feeble as a young person could be expected to be from such excessive drains upon the vascular system. The leucorrhœa only ceased, to yield to the hemorrhagy, and the latter gradually to pass into leucorrhœa; so that the patient could never be without the usual bandage for the reception of uterine or vaginal discharges: sometimes the case ceased to be menorrhagic, but only because the hemorrhagy itself was protracted for many weeks, once four,

once six, without intermission, from March 1827, to September 1828, however, the periods were quite regular.

In September 1828, this patient began to use a cold lotion, applied over the uterine region. The next catamenial period occurred a few days afterwards; it was attended by excessive hemorrhage for twelve days, a faintly tinged discharge for three days more, and then by profuse leucorrhœa.

At the latter end of October, five grains of the ergot of rye were prescribed to be taken three times a day, in pills, beginning after the catamenia had flowed three days. Little effect was observed. The medicine was increased to four times a day, at the *beginning* of the ensuing catamenial period. The discharge was evidently checked. The ergot being continued, it greatly abated the leucorrhœa.

The ergot having been omitted, was resumed at the commencement of the next expected catamenial period. The flow was retarded in its appearance for four days, was altogether moderate in its quantity, free from coagula, unfollowed by the faintly tinged discharge, or by leucorrhœa.

This was observed in December. Three months have elapsed since that period. The patient has been free from all menorrhagia, and all undue flow of the catamenia, and from leucorrhœa. The medicine has been regulated by herself, being omitted and resumed at intervals. The colour, the strength, and the flesh are restored, and the symptoms so characteristic of vascular exhaustion have gradually, but totally subsided.

I have not since had occasion to try the effect of the ergot in menorrhagia; but I have prescribed it in many cases of leucorrhœa; in all, with the most prompt and decided advantage. The benefit which accrues from the ergot is indeed frequently experienced, in the most marked manner, in the space of five days; and I have generally recommended this medicine to be taken for a somewhat longer period than this, then to be abandoned for a few days, and again resumed.

In the first case of leucorrhœa in which I gave it, the patient had suffered for several years from returns of this affection, and, for three weeks previously to her visit to me, it had subsisted in such a degree as to incapacitate her for her occupation as a servant: she had become pale and weak, and affected with sad headach. After an aperient, this patient took five grains of the ergot four times a day: she was better in three days, much better after the lapse of

a week, and perfectly well at the end of a fortnight. Nothing could be more marked than the prompt efficacy of the remedy.

The other cases it is quite unnecessary to detail.

It will, of course, be necessary to give the ergot with discrimination. We could expect no good from it in cases of an inflammatory or organic nature, or in vaginal discharges not uterine. It is not *every* sanguineous or white discharge which can be expected to be remedied by the ergot. The former should, I think, be distinctly catamenial or menorrhagic, or at least independent of inflammation or organic disease; the latter uterine, and not merely vaginal, and, of course, not dependent on any continued cause, as undue lactation. In such cases, well marked and distinguished, I believe the ergot of rye will be found to be a most useful remedy.

It is quite plain, contrary to the opinion of a late writer on the virtues of the ergot of rye, that this substance exerts its power over the state of the uterus in other circumstances besides that of approaching contraction. A state of what may be deemed undue relaxation or want of tone in this organ, seems to be under the immediate influence of the ergot.

I may here add, that I have tried this remedy in a distinct case of chlorotic amenorrhœa, without the least good effect.

15, Keppel street, Russell square;
April 11th, 1829.

MIDWIFERY.

Result of the last Hundred Cases of Labour, attended by Mr. JEWEL and his Pupils; as stated in a Lecture to his Class.

Natural	73
Premature	1
Protracted beyond twenty-four hours	14
Twins	2
Feet presentation	2
Breech ditto	4
Arm ditto	1
Hemorrhage after delivery	2
Forceps case	1

Total 100

MR. JEWEL observed, that he copied this statement from a book, which contained a faithful record of all cases of labour attended by himself and pupils in private and dis-

pensary practice, and which were arranged under the following heads: *Name—residence—when delivered—sex of infant—case—observations.*

He had brought this statement before his class more as a matter of interest and curiosity to the students individually, than as a criterion by which they were to judge of the frequency of difficult or unusual cases. Calculations of that kind had already, and with a great degree of accuracy, been made from the registers of the different lying-in hospitals in this and other countries.

The premature case, first to be noticed, occurred in a poor patient at the seventh month of utero-gestation. At first no cause could be assigned for the premature expulsion of the child, but, upon further inquiry, it was ascertained that the woman had been labouring under syphilis for some time, and was then under the influence of mercury.

In eight out of the fourteen protracted cases, the *secale cornutum* was exhibited in powder, in doses of from twenty-five grains to half a drachm; and in five the results were most satisfactory. One case deserved particular notice.

A lady was in labour of her fourth child. Upon entering the chamber, Mr. J. was informed that her former labours had been very protracted, for which reason she had not sent so early as she otherwise would have done. Upon making the usual examination, the *os uteri* was found scarcely dilated beyond the size of a shilling, but there was a capability in it of further dilatation; a distinction, Mr. J. observed, of great practical importance. The uterine power was inefficiently and feebly exerted, and in this state the patient had remained for the last five hours. Twenty-five grains of the *ergot* were then administered. In fifteen minutes there was a strong pain; the uterus then took on a regular and very effective action, and a fine healthy child was expelled within the hour. The recovery of the patient was more rapid and permanent than it had been after any of her previous labours.

Mr. J. then observed that, although he had experienced occasional disappointment in the administration of this medicine, he could not but entertain a most favorable opinion of it; and he thought a practitioner would be guilty of a dereliction of professional duty, if he went to a labour unprovided with it; as, in cases of hemorrhage, for instance, when it might sometimes be employed with great advantage, the delay occasioned in sending for it might be fatal to the patient. Besides, it was a part of the duty, also, of the accoucheur to relieve the sufferings of his patient,

when it could be done upon sound obstetric principles, and he considered the ergot of rye as a most valuable acquisition to the means which might with great propriety be adopted in order to facilitate the parturient process. Mr. J. then exhibited a very neat and compact pocket case, made, according to his own directions, by Thomson, the surgeon's instrument maker, in Windmill street, containing three small stoppered bottles and a female catheter. One of the bottles, being graduated, is capable of holding three doses of the ergot; the other two are for tincture of opium and the carbonate of ammonia.

In the cases in which the feet presented, the children were lost from pressure on the funis, both being first labours.

In two of the breech cases, the children perished from the same cause.

The case of arm presentation was the most interesting. Mr. J. was called to the assistance of a pupil, and found the labour to be preternatural, the hand having dropped through the os externum, and the child in a state of putrescence. The tonic contraction of the uterus was so powerfully exerted as to preclude the possibility of turning, without almost the certainty of laceration. As no hope of the spontaneous evolution of the fœtus could be entertained, the alternate action of the uterus being altogether absent, Mr. J. determined on eviscerating the chest and abdomen of the child, and then to bring it away by fixing the crotchet in its pelvis or spine, in imitation of the spontaneous evolution, as recommended more particularly by Dr. Douglas and Dr. R. Lee; the latter of whom kindly assisted in the present instance. The arm of the child having been removed, the thorax was perforated and the ribs broken down, with the perforator and craniotomy forceps. The thoracic viscera were then removed, and subsequently those of the abdomen also. The crotchet having been firmly fixed in the pelvis of the child, the breech was brought down in a manner resembling the mechanism of the spontaneous evolution. The operation occupied about three quarters of an hour, and was accomplished without greater difficulty than might have been anticipated under such unfavorable circumstances. The woman recovered in the usual time, without the appearance of any morbid symptom.

In one of the cases of hemorrhage after delivery, the placenta was retained beyond the usual period, and flooding having ensued, half a drachm of the ergot was given, in

addition to the means usually adopted; and in about twenty minutes the placenta was very easily removed; and the hemorrhage ceased altogether in about half an hour.

The forceps case was not worthy of particular notice. The patient had been in labour thirty-six hours, and, when Mr. J. was called in, the head of the child was low down in the pelvis, but the uterine action had subsided for nearly six hours. As the ergot was not at hand, and as some morbid symptoms began to be manifested, the forceps were employed, and the patient was delivered of a fine living child.

MERCURIAL FUMIGATIONS.

An Essay on Mercurial Fumigations. By JONATHAN GREEN, Surgeon.

VAPOUR baths, by far the most powerful of all sudorific remedies, are so effectual in the removal of some of the various forms of syphilitic disease, that authors have attributed the infrequency and mildness of these affections in eastern countries to their constant use. In the treatment of syphilis, they may be employed as auxiliary and preparatory to, or at the same time with, mercury internally; and, both after and during the administration of vapour baths, this specific remedy is found to act with greater promptness and efficacy, removing affections of long standing, which had even previously obstinately resisted its employment.

In those cases (of too frequent occurrence) wherein, for apparently local symptoms, a greater quantity of mercury has been administered than necessary by the usual methods, and yet the virus is not extinguished, the simple vapour baths have been employed with the most marked success, and, without other assistance, have perfected the cure. They continually tend to diminish the violence of the disease; they regulate its progress, and abridge its duration.

When vapour baths are employed as the principal remedy, they are administered under the form of mercurial fumigations; and experience has amply shown the advantages of mercury under the form of vapour in the treatment of syphilis. On the first appearance of this disease in Europe, towards the end of the fifteenth century, the analogy which was thought to exist between it and certain cutaneous affections, against which mercurial fumigations had been long and successfully directed, led to the adoption of the same means in it, which thus became the first antisymphilitic method of treatment, after the aromatic fumigations, then

generally in use, had been tried in vain; and had they at that time possessed the perfect means of administering them which are now in our power, they would probably have known no other. But the different modes of proceeding then in use were so imperfect, and subject to such serious inconveniences, that they found themselves obliged to substitute frictions in its stead; which were also administered, at the beginning, in so very defective a manner, that they were productive of as dangerous results.

Another specific was then anxiously sought after, and thought to have been found in the sudorific woods; but experience soon placed them in the rank of auxiliary remedies, where they have ever since remained; although very remarkable cures have certainly been effected by their influence alone. To the real specific, mercury, then, it became necessary to return, and it was now tried internally under various forms; and then to the two other was added a third antisymphilitic method, much more dangerous than either.

Frictions, however, were afterwards employed with more method, and consequently with greater success; while at the same time fruitless efforts were made to bring to perfection the method of administering mercurial vapour, the advantages whereof were still too highly appreciated to permit of their total abandonment.

Thus, for the long space of three centuries that mercurial fumigations have been frequently resorted to, the little attention given to their employment, and the defective state of the fumigating apparatus, have often disappointed the hopes of the practitioner.

Towards the end of the last century, Lallouette, a physician of Paris, used them with great success, and published a work containing many instances of syphilitic disease which, having resisted all other means, were perfectly restored by this method; and he has given the best instructions and rules for their employment that have yet appeared. It would seem, however, that his great success was not so much owing to the excellence of his apparatus, which, although superior to all former ones, was still very imperfect, as to the care and attention he bestowed on their administration, and to the preparations from which he disengaged the vapour having none of the inconveniences of those that were previously employed. The advantages, in the treatment of syphilis, to be derived from the employment of the mercurial vapour in fumigations to the whole surface of the body, or any part thereof, are incalculable, now that we

possess such sure and convenient means for exhibiting them. Mercurial fumigations excite, with extreme facility, both those effects, without which syphilis cannot be cured, the absorption of the mercury and free perspiration. They neither require nor operate to the exclusion, at least in the greater number of instances, of the employment of any auxiliary means. They may be used, with the utmost safety, at all seasons of the year, demanding no precaution or particular attention whatever, beyond the time of their administration; and, so far from weakening the patient, his strength is increased under the influence of this method of fumigating, which may be persisted in uninterruptedly to the perfect extinction of all the symptoms. This method is the only one to which recourse may be had without danger in pregnant women, nurses, and infants. It also gives to patients a facility of concealing from every body a knowledge of their situation; while, in following other methods, they are always obliged to admit one or more persons into their confidence; and in this manner it is evident that many inconveniences, and disturbances, and divisions in families, may be averted by the employment of mercurial fumigations.

As a preventive against syphilis, the mercurial fumigations, it is reasonable to conclude, may be superior to all others; for, being used immediately or soon after the infection, it should annul its effects by the complete absorption of the mercurial vapour, which is spread over the whole surface in a state of infinite divisibility. The progress of the contagion will be arrested, and the principle of the disease extinguished, before it has had time to affect the constitution. Thus it seems probable that, by the use of a few mercurial fumigations after infection, the disease will not only be prevented from developing itself, but the very source from which it would have proceeded will be dried up.

In fine, so generally effectual are mercurial fumigations in syphilis, and at the same time so perfectly safe, that some French physicians, well acquainted with these facts from their own experience, have conceived the philanthropic idea of exterminating this scourge of the human race by means of their universal application, to be effected by the formation of establishments in every town, to which all the infected may be indiscriminately admitted.

HYDROCYANIC ACID.

Upon the Utility of Cold Affusion in Cases of Poisoning by Hydrocyanic Acid. By Dr. E. F. GUSTAVE HERBST.

HYDROCYANIC acid is the most violent of all known poisons. Numerous experiments have been made to discover its mode of action; from which it appears to act principally on the nervous system; the symptoms which it produces on the lower animals, when given in pretty large doses, leaving little room to doubt but that its first effect is excessive excitation of the nervous system, whose powers it rapidly exhausts. Hence it is speedily followed by paralysis, muscular flaccidity, insensibility, &c. which are the forerunners of approaching death. The means, therefore, proper to counteract the effects of this poison are such as are calculated to restore the lost sensibility of the nervous system.

Several antidotes have been proposed, which, though not devoid of utility, have not quite produced the desired effect: up to the present time, *Liquor Ammoniaë*, which possesses such great influence over divers poisons, has been also much employed against this. In fact, it diminishes the effects of the prussic acid, especially when given immediately after the poison, and where the dose of the acid would not kill the animal, if quite left to itself: but should some time be allowed to pass, and the quantity of acid be sufficient to destroy the animal, then the effect of the ammonia is less powerful and less certain, and for the most part finally unavailing. Besides, when the aqua ammonia is diluted with water enough to moderate its caustic qualities, it becomes in proportion less powerful; and, though more efficacious, it is also more dangerous in its concentrated state. If the liquor ammoniaë is given undiluted after a dose of prussic acid sufficient to cause death, the following phenomena are usually observed: The animal, from a state of violent convulsions, suddenly recovers the use of his muscles, frisks, takes a few steps, and, again falling down, reassumes his former condition; but the spasms are not so violent, and sometimes entirely cease. The animal remains in this state until excited by another dose of the ammonia, when it moves a few steps, and then again becomes torpid. Sometimes, if the doses are repeated, it recovers the use of its muscles for a longer time, and by degrees is quite restored: but generally, after the first doses, the ammonia produces no lasting benefit; for, though life is sustained for a short time, it is not ulti-

mately preserved by its use. Nor should it be forgotten that the difficulty of deglutition, which is one of the consequences of an overdose of prussic acid, diminishes the value of those antidotes which must be exhibited internally.

When hydrocyanic acid is given in doses which would not, if uncounteracted, prove fatal, cold affusion, only two or three times repeated, is sufficient to neutralize its effects. But, if the dose has been more considerable, the affusion must be copious and frequent; yet its efficacy will chiefly depend on its prompt employment. Cold affusion can be especially relied upon when used immediately after the acid, or during the convulsive stage, even as long as the eyes are insensible and immoveably fixed, the extremities stiff and extended, and the head thrown back. To this state there succeeds general relaxation of the muscles, the respiration becoming gradually imperceptible, the pulse slow, weak, and scarcely to be felt, and in an instant afterwards death supervenes. Even at this period of paralysis, cold water recalls the vitality ready to vanish. The muscles again contract and become hard, the extremities rigid, and every thing successively resumes its natural state. The relation of a few experiments will serve to confirm these assertions.

Dr. Herbst gave to a middling-sized mastiff, three years old, in divided doses, fourteen drops of prussic acid. The dog after some time fell down, and the effects of the poison were strongly manifested. The cold affusion would, says Dr. H., have speedily restored him; but, during the convulsive stage, about twenty drops of liquor ammoniæ were poured down its throat. He immediately sprung up, ran a few steps, and soon fell down again. The muscles were no longer so forcibly contracted as at first. He took, by degrees, one drachm and a half of the liquor ammoniæ, without deriving any apparent benefit in the absolute; though, after each dose, he leaped and ran a little. Another dose of fourteen drops of the acid reproduced most violent tetanus, which was not in the least assuaged by half a drachm of the ammonia. In a few minutes the dog was dead. His tongue and throat were excoriated, and covered with blood.

Dr. H. gave to a small dog, eighteen months old, a considerable quantity of the same acid. The usual symptoms supervened, which (according to Dr. H.) the cold affusion would have easily removed. He poured down its throat half a drachm of liquor ammoniæ, and the dog immediately rose, sprung forwards, and again fell down; the violent

tetanus had ceased, the extremities were no longer stiff. But fresh doses of the ammonia, to the amount of one drachm, were of no avail. The dog was allowed to remain in this state half an hour, when, the respiration becoming gradually weaker, he appeared to be nearly dead. Its head and back were then inundated with water; and his state was thus in some minutes so greatly improved, that he was able to walk with difficulty. The cold affusion was then intermitted, in order to see if he would recover without further aid. At the end of twelve hours the dog was still living, much exhausted, and did not eat; was found dead eighteen hours after. The throat, which had bled a great deal, was much excoriated.

He gave to a puppy of three months eight drops of prussic acid. It was immediately affected in the usual way, and fell down. Dr. H. gave it half a drachm of liquor ammoniæ, in a small quantity of water. The fluid for some time remained in its throat, but, when the animal began to revive and to move about, the greater part was swallowed. The dog soon relapsed into its former state: the muscles became flaccid, and its prostration was so great that fresh doses of ammonia were not even swallowed. The dog died five minutes from the commencement of the experiment. At the dissection, which immediately took place, the general irritability of the muscles appeared to be very great; the heart continued beating for ten minutes;* the venæ cavæ were full of blood, but the brain was not remarkably red.

These experiments prove that ammonia, when used as an antidote to prussic acid, does not always produce the desired effect; for, even when the violent contraction of the muscles was diminished, and a sudden brisk excitation of the vital powers effected, the prostration became greater, and death ensued, even in those cases in which the ammonia was administered under the most favorable circumstances.

Dr. Herbst gave six grains of hydrocyanic acid to a small adult dog, which caused him immediately to utter a plaintive cry, fall down, stiffen his legs, and after some minutes appear dead. His head, back, and whole body were affused with cold water: the respiration was reestablished, and in a few minutes the dog attempted to rise; in fifteen, he could walk; and in half an hour was quite restored.

To a strong bitch, about five years old, Dr. H. gave eight grains of the acid: it was in a few moments seized as the

* The knowledge of this singular fact, in 1809, induced Professor BRERA, of Padua, to employ the hydrocyanic acid in inflammation of the lungs.—
EDITORS.

last, and was about to fall, when cold water was poured upon its head; by which means it was, after a few minutes, quite recovered. It took several small doses, each of which respectively produced a sort of stupor; but this was always removed by the cold affusion. A quarter of an hour after, the animal vomited a great deal of a sort of white thick mucus, and it foamed; but these symptoms ceased in about an hour and a half, when it had taken its ordinary food.

The next morning this bitch again took eight grains of the acid, and immediately fell down. Violent opisthotonos, difficult respiration, and gradual prostration, seemed to announce certain death. Cold water was immediately poured upon its head. In one minute, the breathing having become more free, the dog raised its head, looked about with an expression of astonishment, but remained lying down. After a continuation of the affusion, it rose, and walked with difficulty; and an hour afterwards it was completely restored.

The same experiment, with the same result, was made upon several other dogs; but, in order to prove beyond a doubt the efficacy of cold affusion in counteracting the effects of prussic acid, Dr. H. instituted the two following experiments:

He chose two young dogs, of the same age and size, which had been similarly nourished: he gave four drops of the acid to one of them. After the dose, the animal became quiet, staggered; but soon recovered. A fresh dose of eight drops made it fall, cry out piteously, and vomit a sort of mucus. Although much exhausted, it recovered once more, the opisthotonos ceased; but, after taking four more drops, it rapidly sank, and was dead within four minutes from the exhibition of the first dose.

To the second dog Dr. H. gave sixteen drops in one dose. At first it turned round, then fell down, incapable of motion or feeling. The head was thrown backwards, the legs extended. In thirty seconds the respiration was imperceptible, the beating of the heart nearly so. Dr. H. hastened to use the cold affusion, for the muscles were already relaxed, and the animal appeared to be dead. The cold water at first seemed to effect no change: the first sign of life was the opisthotonos; the relaxed extremities contracted again; whilst the dog uttered a feeble plaintive cry, which soon became stronger. The rigidity of the trunk continued a long time. Cold water was poured all over the animal, who continued to cry, and its body, which was stiff and hard, seemed painful when touched. The

affusion was kept up for fifteen minutes; during which the respiration became stronger; but it became alternately stronger or weaker, as often as the affusion was interrupted or renewed. The same day the dog was completely restored, ran about, barked, and eat as though nothing had occurred.

Dr. B. injected into the left external jugular vein of a dog nine drops of hydrocyanic acid; five minutes after, twelve drops; and after five minutes more, fifteen drops. There was no alteration in the dog, except that his heart beat very feebly, rapidly, and irregularly. Then twelve grains (about twenty-eight drops) were injected at once, and produced great disturbance, involuntary discharge of the excrements, violent tetanus, &c. and soon afterwards general prostration, and almost imperceptible respiration. The cold affusion on the head immediately made the dog rise; its continuation removed the paralysis of the posterior extremities. In a quarter of an hour the dog had quite recovered.

Three days afterwards, Dr. H. injected into the right external jugular of the same dog fifty drops of hydrocyanic acid at once. This time the tetanus was even more violent; however, the cold affusion was not employed till the whole body was in the paralytic stage, excepting the muscles of the eyes, which were still in a state of convulsive contraction. The same result was obtained in this instance; for, in four hours afterwards, the dog appeared as if nothing had happened to him.

Barring a few failures, arising from accidental circumstances, the same favorable results occurred in all the other cases in which the poison was injected into the veins, wounds, nostrils, or eyes. But, when the acid was injected in great quantity, the effects were so sudden that, after the tetanus was become general, there was scarcely time to commence the affusion before death should supervene.

These experiments demonstrate that the hydrocyanic acid, when administered even in doses which would be more than enough to cause death, may be promptly neutralized by cold affusion upon the head, the back, and the whole body, by which it loses all its deleterious properties.*

* Archiv für Anatomie und Physiologie, by J. F. MECKEL.

INFANTILE CONVULSIONS.

On Infantile Convulsions arising from Spasm of the Intestines. By
JOS. PARRISH, M.D. one of the Surgeons of the Pennsylvania
Hospital, &c.

AMONG the disagreeable effects produced by intestinal irritation in infants, is a species of convulsion resembling the epileptic fit in appearance, but materially differing from the ordinary form of that disease, both in its origin and the mode of treatment which it demands. A character by which it may, in most instances, be readily distinguished from genuine epilepsy, is the total absence of stupor, after the cessation of the convulsions. Instead of remaining for some time in a comatose state, the child, upon recovering from the fit, immediately becomes entirely sensible, and looks as though nothing had happened. The attacks are generally sudden and of short continuance, and in the beginning are seldom frequent. Sometimes two or more will take place in quick succession; and days, and even weeks, will elapse before the return of the convulsions. If not arrested, however, they become more frequent; and at length the nervous system is rendered so excessively irritable, that an almost constant convulsive action is kept up, till the tender frame of the infant becomes exhausted, and sinks under the disease. So far, however, as I have seen, the affection generally yields to proper treatment; and a relapse may be prevented by attention to the diet and the state of the bowels. The infant is usually attacked within the year; and, if it survive the period of dentition, may be considered safe.

That the primary affection is seated in the bowels, and consists of spasm of its muscular coat, is evinced by the symptoms which are presented in the intervals of the convulsions. The child often screams out suddenly, throws itself back, and stiffens its body, exactly as in an attack of flatulent colic; and the comparative ease which it regains in a few minutes proves the affection to have been spasmodic. Even when the pain is less severe, the peculiar motions and complaints of the infant are such as experienced mothers and nurses immediately attribute to uneasiness in the cavity of the abdomen. The relief which sometimes follows discharges of flatus is another proof, if more were wanting, of the nature of the complaint. Indeed, the extrication of air in the bowels is often very abundant; so much so that the abdomen swells, and even becomes tympanitic. The nature of the discharges also

indicates disorder in the alimentary canal; and the existence of acidity is frequently manifested, as well by the sourness of the breath as by the smell and appearance of the stools. It is of the utmost importance to observe accurately these symptoms of abdominal affection, as they both enable us to form a correct view of the nature of the convulsions, and at the same time point out the course of treatment proper for their removal.

In a case which fell under my care in the year 1821, and which unfortunately proved fatal, I had an opportunity of verifying my views of the nature of the disease by dissection. The subject of the attack was an infant about five months old. The convulsions came on instantaneously, without the least warning; and, immediately after they had passed, the patient was quite sensible, and sometimes even playful. At first, several days intervened between the fits; and, contrary to the general rule, they came on at one stated time, at or a little after daybreak. They afterwards became more frequent and distressing; and, towards the close of the case, severe spasms or partial convulsions occurred in the intervals, the child screaming out, and appearing to be in much pain. The treatment was principally directed to the bowels; but leeches were twice applied to the head, and blisters were placed behind the ears. Though relief was occasionally obtained, yet no permanent impression was produced upon the disease; and, notwithstanding all my efforts, the little sufferer expired. Upon dissection, the bowels exhibited strong evidence of having been under the influence of severe spasm. More than half of the small intestines were irregularly contracted. In some places, for more than an inch in extent, the bowel was reduced to the size of a goosequill; in others it appeared as if tied by a thread, its caliber being almost obliterated. The omentum was closely folded up, in the form of a thick twine or small rope, and lay on the arch of the colon. In the gall-bladder was a light-coloured and glairy fluid. No other sign of disease was visible in the cavity of the abdomen or in the thorax. The condition of the brain I did not examine, as I thought sufficient evidence of the cause of death was afforded by the appearance of the bowels.

Though, from the symptoms during life, and the phenomena presented by dissection, I am inclined to attribute these convulsions to intestinal spasm, yet there can be no doubt that difficult dentition greatly aggravates the disorder. This it does, in all probability, more by its influence upon the bowels, than by its direct operation upon the brain

and nerves. Inflammation of the gums in infants is exceedingly apt to produce irritation in the alimentary canal, and, by giving rise to spasm in this part, or aggravating it if already existing, may either serve as a remote cause of the convulsions, or may render them more severe and more difficult to cure. I do not, however, deny that dentition, like any other source of irritation, may produce convulsions by directly operating upon the cerebral system. We undoubtedly meet with instances of the kind; but the symptoms in these cases are materially different from those of the disease under consideration. The attacks are less frequent in their occurrence, are accompanied with greater arterial excitement, and generally exhibit more obvious symptoms of disordered action in the brain.

In the treatment of convulsions from intestinal spasm, we are presented with two obvious indications: namely, to relax the spasm, and to remove those sources of irritation from which it arises. I shall proceed to detail the remedies which I have found most effectual for both purposes. Of those calculated to relax spasm, bloodletting is one of the most important. Though not called for by the condition of the pulse, nor by the existence of any inflammatory action, it sometimes affords great relief, and is useful also by preparing the system for the administration of the antispasmodics. General bleeding is preferable to leeching, as it produces a more prompt and decided impression; but the local abstraction of blood may be resorted to with advantage when the constitution of the child is delicate, and there is reason to apprehend excessive debility from the use of the lancet.

Another important relaxing remedy is the warm bath. This may be used advantageously during the fit, when its duration is more than usually protracted, or the convulsions are uncommonly severe.

But the means upon which I place most reliance are the antispasmodic medicines. Of these I prefer the assafoetida, given very freely, in the shape of emulsion, both internally and by the rectum. In either way it may often be advantageously combined with a little laudanum; especially when, in the intervals of the convulsions, the infant screams much and appears to be in pain. According to the age of the child, from two to five grains of the gum resin may be given every two hours; and, when laudanum is advisable, one or two drops may be added to each dose. In the form of enema, from ten to twenty grains should be administered at once, and repeated more or less frequently, according to

circumstances. Sometimes the assafoetida cannot be retained on the stomach, and its very frequent use in the way of injection may produce unpleasant irritation of the rectum. Under these circumstances, the rectified oil of amber may be usefully employed as a substitute; and I have sometimes derived advantage from alternating this medicine with the assafoetida. I prescribe it in the dose of from two to five drops, rubbed up with gum arabic, loaf sugar, and cinnamon water.

Should the case resist the influence of these antispasmodics, or should they lose their effect upon repetition, the musk jalap may be resorted to. In more than one very severe case I have employed it with the most manifest advantage. The proper dose is from half a grain to one grain every hour or two hours, during the greatest violence of the symptoms. If there should be much pain, laudanum should be combined with the oil of amber or musk, as before recommended with the assafoetida. Sometimes more effectual relief will be afforded by the laudanum in the form of anodyne injection, especially when the stomach is irritable. From four to eight drops may be given in this way, and repeated when called for by the symptoms.

At the same time that these remedies are administered internally for the relaxation of the spasm, the use of external measures for the same purpose should not be neglected. In most of the spasmodic complaints of infants, I recommend the application, along the spine, and over the parts more especially affected, of a liniment composed of oil of amber and laudanum, diluted with equal parts of olive oil and brandy.* In the complaint under consideration, decided advantage may be expected from freely bathing the back and abdomen with this liniment. Garlic and brandy, employed in the same way, is also a useful application. In severe cases, the abdomen should be covered with a large blister.

But while we are thus endeavouring to overcome the spasmodic action of the intestines, we should not overlook those sources of irritation, which, if they do not give rise to it, at least render it more severe and obstinate. In the very commencement of the treatment, the contents of the intestines should be freely evacuated; and, throughout the case, accumulations of feculent matters or acrid secretions should

* The proportions which I generally employ are, of the oil of amber and laudanum, each a teaspoonful; of the olive oil and brandy, each a tablespoonful.

be prevented, by the use of castor-oil, magnesia, or some other gentle cathartic.

As in almost every instance there is more or less acid in the stomach and bowels, the frequent administration of alkaline medicines will be found highly useful. I am much in the habit of prescribing the alkaline infusion, prepared, according to the formula of Dr. Physick, from hickory ashes and soot. When symptoms of acidity present themselves, this preparation, diluted so as to suit the palate of the infant, may be given in the dose of a teaspoonful every two or three hours, in alternation with the antispasmodic medicine which may be in use at the time.

The accumulation of flatus has been mentioned as a troublesome attendant of the complaint. This symptom is often greatly relieved by the antispasmodics before recommended; but sometimes it resists all internal remedies, and the intestines become so much distended with air as to be rendered almost incapable of their usual peristaltic action. The removal of so powerful a cause of irritation is absolutely necessary for the preservation of life. For this purpose I generally employ the dry syringe, by which the air may sometimes be readily abstracted, and the abdomen reduced to its natural size. In a case which I attended in consultation with Dr. Wood, and in which the infant was brought to the lowest possible condition short of dissolution, the happiest effects resulted from the use of this instrument. The tympanitic state of the bowels was immediately relieved, opportunity for the continued action of the proper remedies was thus afforded, and the life of the child preserved.*

Another object of attention, so obvious as hardly to deserve particular notice, is the condition of the gums. These, if inflamed, should be freely lanced, and the operation repeated whenever the wounds heal, so long as the continuance of the inflammation may render it advisable. As recommended in a former communication on the subject of cholera, blisters should be applied behind the ears, and kept open by stimulating dressings. In one instance of dangerous convulsions, in which the intestinal disorder appeared to be aggravated, if not altogether maintained, by

* Sometimes the simple introduction of the point of the tube up the rectum answers the purpose; the air escaping by its own elasticity. Sometimes it is necessary to exhaust the air by repeatedly withdrawing the piston of the syringe, and thus creating a vacuum in the body of the instrument, which can be supplied only by the flatus from the bowels. Relief, however, cannot always be obtained in this way.

severe and obstinate inflammation of the gums, great relief was obtained by the application of leeches to the cheeks. The soreness and tumefaction of the gums, which had been excessive, abated almost immediately; the affection of the bowels gave way before the remedies which it had previously resisted; and the convulsions disappeared with the cause upon which they depended.

I will close this account of the treatment by a few observations on the subject of diet. It is manifestly necessary that all articles of food which have a tendency to produce flatulence, or otherwise irritate the bowels, should be carefully avoided. The farinaceous articles, and animal food of easy digestion, are suitable; and the breast may be allowed when the nurse or mother is perfectly healthy. Sometimes the constitution of the mother is such that her milk disagrees with the infant; and, when this can be ascertained, or is strongly suspected, it is proper that a healthy wet-nurse should be procured as a substitute. In a respectable family of this city, I was successively called to two of the infant children, affected with convulsions from intestinal spasm, of whom the first recovered, but the second died. Having some reason to attribute the complaint to the milk of the mother, I advised that, upon the birth of a third child, a wetnurse should be immediately provided. My advice was attended to, and the next infant entirely escaped the disorder. In all cases, when the child is allowed to take the breast, the mother should be directed to regulate her diet, and to avoid especially all acescent and flatulent food.

In illustration of the preceding statements, and in order to present in one view a connected account of the symptoms and treatment, I will give the details of a very interesting case, which occurred to me in the year 1818.

CASE.—The subject of this note was a remarkably fine boy, aged about nine months. Before I saw him he had been affected with several convulsions, which came on suddenly, and were of short continuance. After one of these attacks he was brought to my house. Finding his gums inflamed and his bowels constipated, I lanced the former, and directed the latter to be freely opened. I also directed the *Lac assafœtidæ* to be given internally, and the spine to be bathed with garlic and brandy.

Shortly afterwards I was called to see him in the night, in consequence of his having two violent convulsions in pretty quick succession. I found him with a cool skin, and a blue appearance about the mouth, but evidently with a

clear intellect. Almost immediately upon coming out of a fit, he appeared to know those to whom he had been accused. As his pulse was somewhat tense, I bled him freely; so much so, indeed, that he fainted under the operation. Soon after his revival he was attacked with another fit, which, on his being put into the warm bath, subsided in two minutes. Upon administering some *Lac assafœtidæ*, I observed the escape of flatus from the stomach; and that the child suffered great pain was manifested by his stiffening himself, and screaming very frequently. I therefore gave him an enema of *assafœtida*, with nine drops of laudanum; and, upon leaving the house, directed that, if this should not afford relief, one drop of laudanum, with a little *assafœtida*, should be administered every two hours, till he should become easy. I also recommended that a large spice plaster should be placed upon the abdomen.

The subsequent part of the night was passed more comfortably; but about daybreak he had another convulsion, which was said to be more violent than any of the preceding. He was again put into the warm bath; and a medical friend, who remained with him during the night, gave him a mixture consisting of one drop of laudanum, four drops of the spirits of hartshorn, and a little magnesia, and applied a pair of blisters to his legs.

In the morning I again saw him, and, being impressed with the conviction that much of the mischief depended upon acid in the stomach and bowels, I directed a teaspoonful of the alkaline infusion to be given every two hours; and the mixture above mentioned to be repeated at the same interval, if the child should be in pain. Under this treatment, united with the external application of oil of amber along the spine, and of laudanum and brandy to the abdomen, he passed the day with more comfort, not having to take the laudanum oftener than two or three times.

On repeating my visit, I was encouraged by finding that his skin was becoming warm and his face somewhat flushed. These symptoms were favorable, as they indicated a determination from the internal organs towards the skin.

On the morning of the following day, I was sent for early. One slight convulsion had occurred about midnight, and, from his restlessness, another was apprehended. I watched him closely, and listened to his language; for infants have a language, and happy is the physician who has studied and understands it. I thought I could gather from his mode of expression that the pain had left his bowels, but that he was very uncomfortable and thirsty, and that a little cold water

would afford great relief. I accordingly gave him some. He took it with avidity, appeared to be refreshed, and in a short time sunk into a pleasant sleep, which continued most of the morning. In the afternoon he again became uneasy and fretful, with his skin warm and his face flushed. The cool water was renewed; and, as the air appeared to refresh him, I directed he should be carried out into the yard, where he soon fell asleep. I mention these facts to illustrate the importance of attending to the signs by which infants express their wants. Much suffering, and perhaps some aggravation of the disease, were in this instance avoided by the very simple remedies of fresh air and a little cool water.

During the day his gums were lanced, and he took a dose of castor oil. The night was passed comfortably, and without convulsions. Next day, however, he was repeatedly threatened with them, and I found it necessary to administer some powerful antispasmodic. The musk julap was preferred. A dose of this, containing rather less than a grain of the musk, was several times repeated, with very great success. In addition, the bowels were opened by an injection of oil with fennel-seed tea; a spice plaster was placed over the abdomen, and the liniments before mentioned were freely applied. By these means the threatening symptoms were removed, and convulsions warded off; nor did he afterwards experience an attack.

Throughout the case the breast had been denied him, as the mind of the mother was greatly agitated, and I feared that, on this account, her milk might prove injurious. But as she was now more composed, and had for several days confined herself to a strict animal diet, I allowed her again to suckle the child; nor did any unpleasant effects result.

Two of the other children were about this time attacked with catarrhal fever; and I was exceedingly alarmed at finding my little patient, after having already suffered so much, seized with violent symptoms of the same disease. It came on with a chill, which was succeeded by a hot skin, an active pulse, and extreme difficulty of breathing. I do not know that I ever witnessed a case more alarming and apparently dangerous. Much relief, however, was procured by bleeding and an emetic of ipecacuanha. A purge of calomel was afterwards given, followed by small doses of the sweet spirits of nitre and antimonial wine. By the occasional use of the warm bath, by bathing the abdomen with laudanum and brandy, and by strict attention to the state of the bowels, we endeavoured to counteract any dis-

position which might exist to a return of the convulsions. Under this treatment the child gradually improved, and in the end completely recovered.

It must be evident from the above details that a proper diagnosis of this disease is of the utmost importance, and that treatment founded upon the idea that the brain is the part principally affected will in all probability eventuate in failure. It is also important to understand that these convulsions may occur in infants predisposed to them, during the continuance of another disease; the usual remedies for which will, by the new state of things, be rendered highly injurious. A case illustrative of this fact occurred to me in the year 1822.

The infant was attacked with croup, for which I prescribed the ordinary remedies; such as bleeding, a blister to the throat, calomel, antimonial wine, seneca, &c. Under this treatment the symptoms of the disease had begun to subside, when the child was suddenly seized with severe convulsions. Evident signs of pain in the abdomen were presented, and the state of the stools indicated the existence of acid in the bowels. I was convinced that the convulsions had their origin in intestinal spasm, and, under this impression, immediately laid aside the internal remedies I had prescribed for the croup. In their place I directed the *Lac assafoetida*, both by the mouth and rectum, the alkaline infusion, and the warm bath. The back and abdomen were frequently bathed with the liniment of oil of amber, laudanum, &c.; and poultices containing the oil of amber were applied to the feet. A surprising change for the better ensued, and the child happily recovered.

As closely connected with the subject of this paper, it will not be improper to notice another effect of spasm of the bowels, which is liable to be mistaken for disease of the brain. I cannot do this better than by communicating the following brief account of a case which fell under my attention. The child was affected with dysenteric symptoms, and in the progress of the disorder became delirious. By the usual treatment these symptoms were relieved, and I considered my patient convalescent. In a short time, however, a change for the worse took place. The bowel affection returned, accompanied with the most distressing derangement of the mental functions. The child was completely maniacal, showing a disposition to snap at and bite, like a dog, whatever approached it. My attention was very naturally directed to the head; and I concluded that some serious cerebral disease must have occurred, to

give rise to such a train of symptoms. But the measures suggested by this view of the nature of the complaint were wholly ineffectual, and the little sufferer expired. Having obtained permission to examine the body, I opened the cavity of the cranium, and was surprised to find scarcely a vestige of morbid action in the brain. Within the abdomen, however, were discovered marks of violent spasmodic disease. The small intestines, through almost their whole extent, were irregularly contracted; in many places being diminished, for an inch or two in length, to the size of a worm, in others appearing as if tightly embraced by a ligature. I have no doubt that in this case the maniacal symptoms were the result of excruciating pain arising from violent spasm in the bowels.

On the whole it may be concluded, that the subject of intestinal spasm, involving, as it does, such dangerous consequences, is of the highest interest and importance; and that it more especially claims our minute attention, as, from the delusive nature of the symptoms sometimes presented, and our inadequate means of information relative to the feelings of the patient, we are liable, without much care, to be led into mistaken judgments, and to adopt inefficient, if not injurious modes of treatment.*

CATARRHUS VESICÆ.

Remarks upon the Catarrhus Vesicæ of old Persons. Read at the Royal Academy of Sciences. By Dr. CIVIALE.

DISEASES of the genito-urinary organs have for a long time attracted the particular attention of medical practitioners. Still this part of surgery yet requires considerable improvement. These diseases destroy a great number of persons who are advanced in life, and there are, in fact, but few men who have arrived at a certain age, and who have led a sedentary life, who do not feel some affection of the kind. The particular subjects to which I have directed my attention have induced me to study very carefully the genito-urinary organs, and the maladies to which they are obnoxious.

Old men, especially those who have devoted themselves to literary labours, are frequently attacked with chronic inflammation of the bladder, the progress of which is slow and often insidious. It but too frequently happens that such patients do not apply for medical assistance until the

* North-American Med. and Surg. Journal.

time has passed by when any benefit can be expected from the resources of our art.

The majority of surgeons have considered chronic catarrh of the bladder in old subjects to be almost always a fatal disease. This prognosis should not, however, extend to those accidental inflammations of the bladder which may arise from irregularities of diet, the sudden application of cold, or the recession of certain cutaneous affections. In these cases the disease is usually much less severe, and more under the control of remedies. This is also the case when the disease arises from the presence of a foreign body in the bladder, or from some obstacle to the passage of the urine through the urethra. If in such cases the cause be removed, the symptoms disappear.

It is my intention, upon the present occasion, particularly to consider the *catarrhus vesicæ* which arises at an advanced period of life, without any manifest cause, and for which we have yet to devise any satisfactory and effectual mode of treatment. Numerous facts have convinced me that this common and serious disease of the bladder is the result of muscular atony of the viscus. In old age the bladder naturally becomes torpid, and the urine is expelled slowly and with difficulty. This weakness of the bladder is increased by a sedentary life, a sitting posture, the use of soft and warm cushions, and particularly by neglecting the first inclination to make water, and by violent and frequently repeated mental emotion. When the bladder is distended, its contractions are imperfect, and only a part of the urine is evacuated. Hence arises inflammation of the mucous membrane, a collection of mucus takes place, and great irritation is the consequence. The inflammation becomes more severe, extends, and at length invades the whole internal surface of the bladder. The muscular coat is deprived more and more of its power of contracting, like all other muscles which are the seat of inflammation. Notwithstanding the inclination which the patient now feels, it is with much difficulty and pain, and great effort, that he can pass even a small quantity of glairous urine, which is frequently almost solid and of a deep colour. This state may continue for a long time. Various changes may arise from the effects of diet or medical treatment. The disease may even be much alleviated, and a speedy cure be anticipated: but our hopes will be disappointed; the symptoms will reappear with additional severity. The general health becomes deteriorated, the various functions of the body are disturbed, fever arises, marasmus follows, and

the patient dies. After these remarks, the nature of the means we should employ must be evident. We must endeavour to diminish the sensibility of the urethra, if the patient is very irritable, to facilitate the flow of urine, to prevent the accumulation and retention of glairy matter in the bladder, to change the morbid action of the viscus, and to transfer the irritation to the exterior of the body. These indications are precise, and not difficult to fulfil. We know that we can always accustom the urethra to the presence of a foreign body, so that the passage of a catheter may be effected without either difficulty or pain. By the assistance of this instrument, the flow of urine and mucous matter is facilitated, and we can also replace the irritating contents of the bladder by mild injections, which may be changed for those of a more tonic nature, in proportion as the irritability of the bladder is diminished. When by these means we have restored the contractile power of the bladder, and have rendered the urine limpid and its evacuation easy, we may have recourse to cold applications applied to the perineum and hypogastrium, and to dry aromatic frictions upon the same parts, and also upon the inferior extremities.

It is almost superfluous to add, that the patient must pay attention to his diet, take moderate exercise, and keep his bowels in regular order. For common beverage he may take soothing aromatic liquids.

It must be presumed that the practitioner will possess sufficient judgment to modify the details of his practice according to the duration and intensity of the disease, the constitution of his patient, and the influence of climate.

Among the numerous facts which convince me of the utility of the curative plan I propose, I may cite the following:

A man, upwards of seventy years of age, had felt for about a year the first symptoms of *catarrhus vesicæ*, for which he had been treated, in succession, by the best practitioners of France, Switzerland, and Germany. Anti-phlogistics, narcotics, derivatives, and various other remedies, had been either alternately or simultaneously employed. The urine, however, became more and more loaded with glairy, fetid, black, and purulent matter; the pain was more severe and continued; the patient lost his appetite and strength, and passed sleepless nights; he was no longer able to leave his room. To the symptoms of catarrhal affection was joined obstinate constipation, the effect of opium, which had been administered in large doses.

I was consulted, and I recommended the patient's removal to Paris. In endeavouring to assure myself that he had no stone in the bladder, I found that the bladder could not empty itself, that its internal surface was very irritable, and that when the catheter came in contact with it great pain was produced. These circumstances, and the condition of the urine, indicated the existence of an intense and long-standing catarrh. The symptoms had probably been increased by a voyage of 150 leagues.

The remedies previously employed were forthwith abandoned; the patient was placed upon a cold regimen, and ordered to take soothing drinks, and to have emollient clysters. The catheter was introduced merely to facilitate the flow of urine and of the glairy matter, and to inject at first tepid, and then almost cold water. This mode of treatment, in about three weeks, reestablished the contractile power of the bladder, alleviated the pain, and rendered the urine limpid. The patient regained his appetite, and slept better, and was now, in fact, in a very gratifying state.

By the employment of lithotritry, I have been led to the detection of the cause which principally contributes to keep up the catarrhus vesicæ in old persons, and to the treatment the best adapted to oppose the progress of the malady. I have observed that patients affected at the same time with stone and catarrhus vesicæ so severely as to render the operation dangerous, were always much relieved after the first and second attempts to break down the calculus in the bladder. The urine, which had been turbid, glairy, fetid, and purulent, suddenly became as limpid as in the healthy state. The evacuation of it, which had been previously difficult and painful, became easy. The patients, who were debilitated, constantly suffering, and desponding in mind, were more cheerful and animated. In a few days a remarkable improvement was observable in the general health. Such an alteration could not be attributed to the diminished size of the calculus; for experience teaches us that, in strictly calculous diseases, the patient is not relieved until the last fragments of stone are removed. My attention was therefore directed to the particular state of the bladder, and to the influence which the operation exercised upon that organ. I ascertained that most of the patients suffered less from the stone than from the catarrh of the bladder. The painful straining they experienced was when they began to pass their urine, and not when the stream had almost ceased to flow. The introduction of a

catheter immediately after the patient had made water proved that the bladder was not entirely emptied; that there was, in fact, a state of torpidity, and some degree of paralysis, of the organ. The presence of the catheter, the frequent evacuation of the urine and mucous matter, and the injection of a sufficient quantity of water to distend the bladder, together with the friction of the branches of the instrument,* changed its morbid action, and restored its contractile power. Hence the improvement which I have pointed out.

The same experiments have been followed by the same results when no stone was contained in the bladder.

These considerations upon a morbid state, connected in so many respects with the disease of stone in the bladder, led me to offer a few remarks upon lithotrity. The results which I last year obtained by the application of this mode of treatment, have been still more satisfactory than those of the preceding years. Patients, whose condition at first prohibited the employment of it, have been operated upon with success, notwithstanding considerable enlargements of the prostrate gland, or of fungus, or old standing catarrh of the bladder. So much was the general health disturbed in some of these patients, that several surgeons had refused to perform the operation of lithotomy. I may mention two facts. M. D. came to Paris in 1827. He was admitted into an hospital, and some ineffectual efforts were made to crush the stone. The symptoms produced by these attempts were so severe that they could not be repeated; neither could any other operation be had recourse to. The patient returned home, with the hope of reestablishing his health, but the symptoms of inflammation of the bladder continued. Wearied with suffering, and conscious of gradual exhaustion, M. D. again visited Paris, but it was not yet deemed prudent by other surgeons to attempt either the operation of lithotrity or of lithotomy. The stone was of considerable size, the bladder seriously affected, the general health very bad, and the patient much emaciated. Such were the appearances when I was consulted. The operation† completely succeeded: it was performed at La Pitié, in the presence of M. Lisfranc and his numerous pupils. The patient was dismissed perfectly cured.

The other case is still more remarkable. M. P., of

* M. Civiale refers to the instrument employed in breaking down the stone in the bladder.—Ed.

† Of breaking down the stone in the bladder, in the manner recommended by M. C. and other surgeons.—Ed.

Paris, had been under treatment for a year, sometimes for stricture of the urethra, and sometimes for disease of the prostate, and lastly for ulcers in the bladder. No benefit was obtained from any of the means that had been adopted. I was at length consulted. I ascertained that the bladder contained a large stone, of unequal and rough surface, which had deceived those who had previously examined the patient respecting the nature of his disease. The stone being composed of calcareous phosphat, which was very friable and soft, particularly on its superficies, it was mistaken for a soft body. In other respects M. P. was in the most unfavorable state. The urine was purulent, and flowed away involuntarily; loss of appetite, sleepless nights, continued fever, and great emaciation. The operation was performed in the presence of many practitioners, among whom was M. DUBOIS. In four sittings, of about five minutes each, the stone was broken down and extracted. No particular symptoms followed, and the patient recovered much more rapidly than could have been anticipated.

As might be expected, the operation of lithotripsy has already considerable influence upon the minds of patients afflicted with stone in the bladder. They now begin to be aware that they should lose no time before they submit to its employment. Each year I see about the same number of patients. In 1825 and 1826, I only operated upon about one third of those who presented themselves; in 1827, upon more than one half; in 1828, two thirds were cured by lithotripsy. The shorter the duration of the disease, the smaller and less numerous are the calculi: in such cases, therefore, the treatment is much easier and less tedious. In a great number of recent cases, one or two very short sittings have been sufficient to destroy the stone. Thus more than one hundred patients afflicted with stone, and upon whom I have successfully operated in a short space of time, confirm the importance of lithotripsy, and the judgment which the Academy has passed upon this mode of treatment.*

DROPSY OF THE PERICARDIUM.

Case of Dropsy of the Pericardium. By F. W. WOOD, Esq.

WILLIAM FORNSETT, aged twenty-six, by employment a husbandman, applied for medical aid, 19th December, 1828. He is of a sanguineo-bilious temperament. Pulse ninety-eight, hard, sharp, and peculiarly vibrating; tongue furred and brown; mouth clammy, with a coppery taste; bowels

* Journal Complémentaire.

constipated; great tenderness over the epigastric region, and along the margin of the liver; urine high coloured, with a deep red sediment; pain in the head, shoulders, and legs; difficult respiration, and constant dry cough; no appetite. Has been ill nearly a year. His family report that he has been an habitual drunkard for many years.

Treatment.—V.S. $\mathfrak{z}\text{xviii}$. Blood buffed and cupped, serum yellow green. R. Hyd. Submur. gr. vj.; Ext. Coloc. comp. gr. xij. M. fiat pil. iij. stat. sumend.—R. Hydrarg. Submur. gr. iss.; Aloes purif. Ext. gr. iss.; Sapo dur. q. s. fiat pil. omni nocte sumend.

20th.—Slight amendment. From this time until January 19th, he fell into other hands, and was principally treated for some presumed pulmonic affection; when, finding himself much worse, he returned to my care.

Jan. 19.—Pulse 130, full, hard, and vibratory, resembling the blow of a liberated spring against the finger, and distinctly *audible* at the forearm and along the thigh. Upon using the stethoscope, the noise in the heart resembled the escape of steam from a tube. Pulsation of the carotid and temporal arteries visible. Head free from pain; bowels constipated; urine scanty and high coloured; abdomen swelled and tense, accompanied with tenderness; cough frequent and harsh, expectorating a thin glairy fluid in small quantities.

V.S. $\mathfrak{z}\text{xxxij}$. Blood sily, serum tinged green, much cupped; appearance, while flowing, dark and muddy.—R. Aloes purif., Hydrarg. Submur. aa gr. iij.; Pulv. G. Resin Scamm., Ext. Coloc. c. aa gr. iv. M. fiat pil. ij. s. s.—R. Pil. Hydr. gr. iv. ter in die sumend. cum Pulv. Digitalis gr. $\frac{1}{2}$; Pulv. Tragacantha c. gr. v.—Milk diet, and to be kept still.

20th.—Not seen.

21st.—Pulse eighty; breathing relieved; pain in the epigastric region much diminished; evacuations plentiful, but dark and fetid; cough less frequent; sleeps tolerably well; countenance sallow, but without that expression of anxiety so strongly depicted on the 19th.—Medicines cont.

23d.—No pain; pulse increasing, 98 to 100; evacuations dark coloured and scanty.

24th and 25th.—No perceptible alteration.

26th.—Mercurial action taken place; slight ptyalism; bowels obstinately constipated; pulse 100, hard and vibratory.—R. Ext. Coloc. c. gr. xv. fiat pil. iij. s. s.—R. Magn. Sulph. 3i.; Pulv. Digitalis gr. $\frac{1}{2}$, fiat pulv. ter in die sum.

27th, 28th, 29th.—Reported much the same.

Jan. 30th.—Mercurial action subsiding; pulse 100; re-

spiration difficult; bowels inactive; tongue furred; restlessness, cough, and thirst.—R. Magn. Sulph. $\mathfrak{z}\text{ij}$.; Mist. Camph. $\mathfrak{z}\text{iv}$.; Infus Sennæ $\mathfrak{z}\text{ij}$.; Tr. Digitalis $\mathfrak{z}\text{iss}$. M. cap. $\frac{1}{4}$ partem quarta quaque hora donec, mag. denide cap. coch. responderit alvus quartis horis.—V.S. $\mathfrak{z}\text{xij}$

31st.—To take the mixture, (coch. mag. ij . tertiis horis.) Bowels freely relieved: stools dark and fetid, improving after the early dejections; copious sediment in the urine; pulse ninety-four, character as before.

February 1st to 4th.—Ordered the mixture occasionally. Pulv. Digitalis increased to three grains three times a day.

5th.—Pulse 90, volume slightly diminished; bowels regular; dejections healthy; pain throughout the thoracic cavity; countenance tinged yellow; eyes languid, but bright; appetite (for the first time) moderate; evident prostration of strength. Seen at intervals, until placed under Dr. YATES' care. Ordered, Pulv. Potas. Supertart. $\mathfrak{z}\text{vj}$. solve in aquæ $\mathfrak{f}\text{biss}$. cap. $\mathfrak{z}\text{ij}$. ter in die; adde Tr. Digitalis mx . singulis dosibus —R. Ext. Hyoscyami, Pil. Hydrarg. aa gr. xij . Misce et div. in pil. equales vj . sumat i. omni nocte. —Empl. Lyttæ sterno.

Dr. Y. expressed it as his opinion that there was organic disease of the heart.

The patient continued the use of these means for three weeks. He was then confined to his bed. Pulse now 100 and upwards, character the same, but less energy; legs œdematous; face pale, lips lead coloured; cough violent; sleeps in a perpendicular posture; sense of general uneasiness; very restless. Relieved by small doses of compound spirit of æther. He lingered for a few days, when death terminated his sufferings.

Permission having been obtained to examine the body, it was opened on the fourth morning after his decease. Upon turning back the sternum, the attention of myself, Dr. STONE, and Mr. LUCAS, was instantly attracted by the appearance of a large bladder, occupying the whole of the left and nearly two parts of the right side of the thoracic cavity. Further investigation discovered this to be the pericardium, which was distended to this extraordinary size. Upon carefully emptying its contents, it was found to contain two quarts of a perfectly limpid fluid. The outer coat of the pericardium had a thin shining appearance, whilst on the inside was deposited layers of coagulable lymph, resembling the rugæ on the stomach of a cow. The heart was also covered with a similar deposit; its parietes were much thickened, and it appeared as if foreshortened, the apex being pressed upwards. In the left

ventricle was a portion of coagulable lymph, of a yellow sizzly appearance, of nearly an ounce weight. The carnea columnæ were much enlarged; the valves free from any apparent disease. The structure of the lungs was perfectly unimpaired.

Abdominal cavity: Stomach and intestines quite healthy; liver rather enlarged, and somewhat indurated; gall bladder filled with healthy bile; kidneys and spleen healthy.

The head was not examined, as there were no indications of disease in the brain.

It may be worthy of observation, that the mother of this patient died of ascites.

Tunbridge Wells, Kent.

The quantity of fluid effused between the pericardium and the heart in this case is very remarkable. Dr. BAILLIE observes, in speaking of dropsy of the pericardium, ("Morbidity Anatomy," Wardrop's edit. vol. ii. p. 8,) "This water varies a good deal in quantity, amounting in some cases hardly to two ounces, and in others to more than a pint. Although the quantity accumulated be large, yet the pericardium is never very much stretched, but always appears as if it could contain a greater quantity. It is probable, therefore, that the pericardium may really grow so as to keep pace with the accumulation; and this would seem to be necessary, in order that the heart may have room for dilating its several cavities."—EDITORS.

VARICOSE VEINS.

A CORRESPONDENT suggests that the best mode of intercepting the circulation through the veins, in cases of ulcerated legs, for example, would be by applying a ligature to the vein in the usual manner, and then dividing the vein above the ligature. By this proceeding, the superior portion of the vein, at the place where it is intercepted, would be no more likely to communicate an irritation to the heart than in cases of amputation, when the same vein would of course be divided. The ligature remaining on the lower portion of the vein would, it is presumed, be sufficient to prevent any considerable hemorrhage; since no blood could escape from the superior orifice except by a retrograde circulation, which the valves of the vein would so far oppose, that a common dressing, with the aid of a compress, would be a sufficient security. It is agreeable with analogy to suppose that the ligature may be suffered to remain on the lower orifice of the vein until it is spontaneously detached, without danger of any sympathetic affection of the heart.

HOSPITAL REPORTS,

(Principal condensed from various Periodical Publications.)

EXFOLIATION OF THE BONES OF THE PELVIS.

Case of Exfoliation from the Bones of the Pelvis, causing obstinate Sinuses. (ROYAL INFIRMARY, EDINBURGH.)*

THE object of the paper from which we select the following case is to show that sinuses in the region of the pelvis sometimes depend not on caries, but on death of the bone, which, exfoliating in some part of the pelvis far from the surface, causes continued irritation by the presence of the loose portion; whence it is proper, Mr. SYME observes, in the treatment of all sinuses in this part of the body, not obviously proceeding from caries, to search for such exfoliations, and remove them if they are found to exist.

CASE.—Ninian Mackenzie, aged twenty-two, a plasterer, in the beginning of November last, asked my opinion as to a complaint which he firmly believed to be incurable. He showed me an opening in the left groin, from which there issued a thin gleet discharge, and around which there were many long cicatrices extending all the way from the pubis to the spinous process of the ilium. He also complained of a painful hardness in the lumbar region of the same side, midway between the last rib and crest of the ilium. There was no external tumor, but a distinct induration could be perceived on pressure, which was very painful. In addition to these complaints, he mentioned that his legs were so weak as to prevent him from walking steadily, and that he had frequent desire to make water, with uneasiness in doing so. On desiring to know the history of the case, he gave me the following relation:

Five years ago the scaffold on which he was working happening to give way, he fell with it to the ground, and received in the fall a blow from one of the planks on his left loin. He felt little inconvenience at the time, and continued at the work in which he was engaged; but in the course of a fortnight he began to feel pain in the part struck, which gradually increased and extended into the groin, where a tumor about the size of an egg at length appeared, and induced him to enter the Royal Infirmary of this city two months after the accident. Leeches and other measures of a similar nature were employed, with the effect of removing the tumor, but not the pain. At the end of eight days he returned home, but found himself unable to work for the following fourteen weeks. He then began to do so, when the pain, which had never

* From a paper by JAMES SYME, Esq. Surgeon and Lecturer on Surgery in Edinburgh. Edinburgh Med. Journal, April 1829.

entirely left him, increased in severity, and in the course of two months became very distressing. At the same time the tumor again appeared in his groin, and he now perceived that his left thigh was drawn up to the body, so that he could not extend it. The swelling then opened spontaneously, and discharged an immense quantity of matter, with great relief to all his uneasy feelings; but finding that the running continued for five weeks without any abatement, he once more repaired to the Royal Infirmary, where the sinus was injected, and very freely dilated in the groin, so as to occasion the extensive cicatrices already mentioned. At the end of two months he was dismissed incurable. He went home, and during the five succeeding months was treated by different practitioners of eminence in this city without success: indeed, the means they employed were the same as those found unavailing in the infirmary, viz. injections. He at last concluded the disease to be hopeless, and abstained from all further surgical treatment, working at his trade when the pain, &c. allowed him to do so.

This story, together with my own observations, led me at once to conclude that the painful hardness of the loins depended on an abscess caused by, and containing an exfoliation of bone; and that, if this source of irritation were removed, as the patient was a stoutly made young man, he would soon get well.

Having explained to him my views of the case, I obtained his ready assent to any thing I might think proper for affording him a chance of recovery, of which he was naturally very desirous, not only on his own account, but on that of his wife and family, who depended on his exertions for their support.

In the presence of my friends, Drs. Mackintosh and Ballingall, I made an incision about three inches long in the left lumbar region, parallel with the crest of the ilium, and, cutting down to the induration, opened an abscess containing a thin fluid. I then introduced my finger, and finding an aperture through the abdominal muscles, searched for the exfoliation, which I soon detected lying on the inner concave side of the ilium, and easily removed by means of a pair of long forceps. Many large sinuses could be felt running in various directions, but not being able to discover any more loose bones, I concluded that every thing necessary had been done, and therefore dressed the wound.

The patient suffered no inconvenience in the way of constitutional disturbance, but a very copious discharge issued from both orifices for several days; it then grew thick, diminished, and ceased at the artificial aperture. It still continued, however, at the old opening; and, as I found that the sinus descended into the thigh somewhat lower than the orifice in question, I dilated it downwards, after which it also soon healed; and on the third week from the operation I showed Mackenzie to my class perfectly well, without any pain or uneasiness of any kind, any defect in his power of progressive motion, or any disturbance of his urinary organs.

LITHOTRITIE.

Case in which the Operation of Lithotritie was successfully performed by ROBERT LISTON, Esq. one of the Surgeons of the ROYAL INFIRMARY of EDINBURGH, Lecturer on Surgery, &c.

ANDREW LEECHMAN, aged seventy, was admitted into the Royal Infirmary on the 10th November, 1828. He stated that, for five months past, he had been labouring under all the symptoms of stone in the bladder. On sounding him, a stone was distinctly felt. As he had a great aversion to being cut, and as his urine seemed to indicate a diseased state of the bladder, it was thought advisable to break down the stone, in preference to the usual operation.

On 13th November, a solution of opium having been injected into the bladder, Mr. Liston introduced Civiale's instrument, but, owing to the restlessness of the patient and the irritable state of the bladder, did not succeed in grasping it completely. Several small portions of stone, however, came away in the fangs of the instrument, and during the night. He suffered no inconvenience from the operation.

On the 15th, he passed a barleycorn incrustated with calcareous matter. On the 16th, a piece of straw with the same incrustation. He complained of pain in the testicles. On the 18th, a small abscess having formed in the scrotum it was opened.

The instrument was again introduced on the 25th. The stone was fairly laid hold of, but was so soft that it was crushed by the instrument; on withdrawing which several fragments of seeds were found adhering. He now confessed that, while reaping during the last harvest, he had introduced a number of barleycorns into his urethra, but would not say for what purpose.

The patient had repeated attacks of retention of urine after last operation, from the larger portions of stone lodging in the urethra. He passed in all thirteen fragments, having entire barleycorns for their nucleus, besides a much greater number having only small pieces of the beards. He had now little pain, and the quantity of mucus in his urine was inconsiderable. He was sounded several times, and, as nothing was felt in his bladder, he was dismissed cured on the 16th December, 1828.*

FEMORAL ANEURISM.

Spontaneous Cure of Femoral Aneurism, aided by Pressure.
(WINCHESTER COUNTY HOSPITAL.)

JOHN LEAVY, ætat. forty-five, labourer, admitted with a large femoral aneurism of the left extremity; had been in the hospital two years previously under Mr. LYFORD, at which period he underwent the operation of having the right crural artery secured for

* Edinburgh Med. Journal, April.

a popliteal aneurism. The patient's account of his present affliction is as follows: In June last, while in the act of mowing, he felt something give way, or (as he expressed himself) snap in his thigh, which was productive of such excessive pain as to entirely prevent him proceeding with his employment. From this time a pulsation, or throbbing, commenced, which became so much aggravated at night as to deprive him of sleep. A very short time elapsed before a small tumor became distinct at the place where he felt the pulsation at the lower anterior and internal part of the thigh, which has gradually increased to its present enormous size, being four or five inches in circumference, circumscribed, rather hard, and can be almost entirely reduced by pressure on the artery above. The whole extremity much enfeebled; and he is quite incapacitated from moving without a stick or crutch. As he was desirous of making some domestic arrangements prior to his coming into the house, he became an out-patient. He was requested to make moderate pressure on the part by means of a flannel roller, and to keep himself at home perfectly quiet.

September 27.—He was made an in-patient. On examining the thigh, the tumor was found to have greatly subsided, and to have lost all pulsation; which, according to his statement, had taken place three days previously. He had experienced a most decided diminution of pain from the pressure of the bandage, which he therefore increased from time to time by tying a handkerchief very tight around the thigh, the knot of which was directly over the centre of the aneurism. Since the pulsations have ceased, he has felt exactly similar sensations to those with which he was troubled after the operation on the opposite limb. He now complains most severely of a burning heat immediately under the skin, which he compares to boiling water trickling down his foot and leg. May not this disordered feeling be connected or depend on the circulation of the parts below the aneurism being carried on by the more superficial vessels?

The pressure has been reapplied by means of a tourniquet and splint. The temperature of both feet exactly correspond.

October 8.—On removing the apparatus by which the pressure had been applied, all appearance of swelling had entirely vanished, and every vestige of disease removed. The knee-joint is now capable of the most perfect flexion and extension, and the patient enabled to walk without any support, and without inconvenience. He was therefore discharged cured.*

* Provincial Gazette, March.

WOUND OF THE HEART.

Extensive Wound of the Heart, in which the Patient survived one Hour and a Quarter. Necrotomy. (WINCHESTER COUNTY HOSPITAL.)

WILLIAM BECKETT, bricklayer's labourer, ætat. twenty-five, native of Winchester, was brought to the hospital, having been precipitated from a ladder on the top of a house in the vicinity of the town, on some wooden railings, which had perforated the upper part of the abdomen, causing a wound about two inches and a half in extent, through which a vast quantity of the small intestines had protruded. A surgeon being sent for at the moment of the accident, reduced the intestines, applied three sutures to the wound, and directed the man to be conveyed to the hospital. On his arrival he was found to be in a very exhausted state, with great coldness, not only of the extremities, but of the surface of the body generally; the pulse, at the wrist or carotid artery, could not be felt; respiration very laborious and interrupted; extreme jactitation, so much so as to require three or four persons to retain him in bed; complete insensibility; the pupils dilated permanently.

On his admission he was immediately enveloped in warm blankets, bottles of hot water applied to his extremities and stomach, and small quantities of hot brandy-and-water administered every ten minutes, which he swallowed not without considerable difficulty. These endeavours were, however, entirely fruitless: the surface of the body still retained its deathlike coldness, as well as its convulsive movements; the respiration became gradually less frequent and more feeble, and he expired in rather more than an hour and a quarter from the time of the fall.

Necrotomy.—The body was examined six hours after death. On tracing the wound, which had been made by the top of the pales on which he had fallen, it was found to have extended through the diaphragm, immediately underneath the sternum, into both ventricles of the heart, and through the septum ventriculorum, leaving a large ragged opening, of one inch in length, in the parietes of each ventricle, by which the blood had escaped from those cavities into the chest, which contained rather more than two quarts of that fluid perfectly uncoagulated. The small intestines in many places were in a complete state of intromission. With these exceptions, the body presented a most healthy appearance.

Reflections.—This case, in one point of view, is highly interesting, and of much practical importance, inasmuch as it clearly manifests that a very considerable injury of the heart may be sustained without causing that immediate dissolution which is commonly supposed uniformly to arise from wounds of this most important and vital organ. We have on record numerous instances of rupture of this viscus from disease, occurring principally, if not entirely, amongst persons at an advanced period of

life. In ten patients, who lost their lives from this organic lesion, it was observed eight died instantly, one at the expiration of about two hours, and another at the end of fourteen. The longest period which a person has been known to survive after a wound of the heart is forty-eight hours, exemplified in the case of a soldier on duty at Haslar Hospital, who had a bayonet plunged into the right auricle. On examination after death, it was found that a coagulum had formed, and completely filled up the wound; but, in an effort to evacuate the bowels, a second hemorrhage took place, and he was found dead, sitting on the night chair.*

PROTRUSION OF THE INTESTINES.

Sudden Protrusion of the whole of the Intestines into the Scrotum. (WINCHESTER COUNTY HOSPITAL.)

JOHN MARSH, ætat. fifty, labourer, was brought into the hospital, having been knocked down and completely run over by a cart laden with bricks. His scrotum, on inspection, was found to be of most enormous size, extending two thirds downwards between the thighs, and measuring in circumference seventeen inches; its colour of a jet black, and its texture, from over distention, so exquisitely thin as to threaten immediate rupture from the slightest manipulation. The abdomen perfectly flaccid, and nearly empty. Immediately over the umbilicus existed a large transverse ecchymosis, indicating the exact course of the wheel over the belly. The patient was incessantly vomiting, accompanied by the most urgent retching, extremities cold, the body bedewed with profuse clammy perspirations, attended with syncope.

On being placed in bed, the viscera were returned to their natural situation without much difficulty, merely by elevating the hips, depressing the shoulders, and applying moderate and careful pressure with flannels moistened in hot poppy fomentation; the facility of reduction depending on the large opening through which the viscera had passed, together with the favorable and relaxed state of the patient. One grain of opium was now exhibited, with the view of allaying the irritability of the stomach, and the abdomen fomented, as well as the scrotum, with poppy fomentation; bottles of hot water applied to the feet.

Four o'clock p.m.—Sickness still continues unabated. Abdomen exceedingly tender, so as to confine the patient entirely to his back. Extremities warm from the application of the bottles containing hot water. Pulse feeble.

Repeat the opium pill; to use a tepid bath for ten minutes, and in one hour after a common clyster to be exhibited. The scrotum to be constantly suspended.

Second day.—Sickness has subsided. Has passed an easy night, without much sleep. Still unable to move the least in bed.

* Ibid.

Clyster has operated twice. Expresses great comfort from the bath. Pulse ninety, and feeble; skin temperate; countenance not so anxious.

Castor oil, six drachms, to be taken directly. To repeat the bath again at bedtime.

Third day.—The castor oil has operated twice copiously. Has passed a very restless night. Intense pain in the abdomen on pressure; slight tension; nausea; pulse 100, and wiry; skin dry; tongue white. The scrotum somewhat reduced in size, though perfectly black.

Thirty leeches to be applied to the abdomen directly; tepid bath as before; blister to be placed over the belly at bedtime; and to take three spoonfuls of the following mixture every four hours: Sulphate of Magnesia $\mathfrak{z}\text{i}$., water, half a pint; make a mixture.

Fourth day.—Bowels have been relieved five times; the evacuations very fetid and dark. Pain on pressure nearly removed, the tension entirely. Has slept at intervals during the night. Blister has produced extensive vesication. Pulse ninety, and soft; skin perspirable; tongue white. The thighs partake of the same discoloration as the scrotum.

Effervescing saline mixture, two table spoonful, to be taken every five hours; the bath at night; and the scrotum to be kept wet with the spirit lotion.

Sixth day.—Has continued to improve in every respect. Quite free from pain, except when endeavouring to turn in his bed. Pulse eighty-six; skin natural; tongue moist; complains of great flatulence. The lotion has had the effect of corrugating and contracting the scrotum, which is still extremely black.

Infusion of Cloves $\mathfrak{z}\text{i}$.; Aromatic Spirit of Ammonia $\mathfrak{z}\text{ss}$. to be taken twice or thrice daily. Diet, a small quantity of animal food.

Twelfth day.—Quite convalescent; has been capable of sitting up in his bed for some hours, the precaution of applying a double truss having been previously taken.

He was discharged cured in three weeks from the time of the accident.

Since this patient has left the hospital, I am informed he is subject to occasional diarrhœa, which is extremely violent, and reduces him very considerably before it can be checked. He is compelled to wear his double truss both night and day, otherwise the viscera descend immediately into the scrotum in very large quantities. He was never afflicted with hernia prior to this unfortunate occurrence.*

* Ibid.

FRACTURE OF THE VERTEBRÆ.

Fracture and Dislocation of a Lumbar Vertebra; Formation of Pus in the Theca Vertebralis; curious Symptoms; Death. (ST. GEORGE'S HOSPITAL.)

JOHN HARRIS, forty-seven years of age, was admitted into hospital on the 8th of March, under the care of Mr. BRODIE, having just received some injury of the back, the nature of which was not clearly ascertained, in jumping to the ground from a height of fourteen feet. The man was drunk at the time this took place, and was reported to have alighted on his feet. There was a good deal of ecchymosis all over the back, and something like an unnatural convexity of the spinal column, about the last dorsal or upper lumbar vertebræ. We did not examine the case at this time, and cannot, therefore, speak to the symptoms presented; suffice it to say, that the patient complained of a great deal of pain about the back and loins.

He was ordered house physic, and next day was bled to ℥xv ; but on the 10th the pain was still severe, and, the bowels being bound, he was ordered some calomel and colocynth, and more house physic. In the evening of the 11th he was restless, and required an anodyne; and on the 12th he suffered much from the pain in the lower part of the loins. However, according to the house-surgeon's report, he passed his water freely, and the blood that had been effused about the back was becoming absorbed. Castor oil was prescribed, and, on the 13th, ten ounces more blood were taken from the arm; fomentations were applied; and salines, with four grains of Dover's powder, given thrice daily. By these means the pain was considerably relieved; but it returned with increased severity in the afternoon of the 15th, when the pulse was found to be frequent and small, the skin approaching to cold, the countenance anxious and unnaturally sallow, the abdomen somewhat tense and tender under pressure.—R. Tinct. Opi. ℥xx . Spt. Æth. c. ʒss . Mist. Camph. ʒi . statim.

Next day, at Mr. Brodie's visit, we saw the patient for the second time since his admission, when there was a remarkable alteration in his appearance. The skin and conjunctivæ were decidedly yellow; the pulse was rapid, but totally devoid of strength; the tongue dry, and of a dusky red; the patient rambling and delirious. He complained of excessive tenderness of the back, and had very little power over the muscles of the lower extremities. The belly was swollen and tympanitic; there was some degree of pain on pressing on the right hypochondriac region; no cough, nor pain in the chest on making a full inspiration. From all that we could learn, the patient had had no rigor, nor any vomiting or nausea. From the nature of the symptoms, the peculiar delirium, the yellow tint of skin, the depression of the nervous and bodily power, the state of the belly, and pain in the region of the liver, Mr. Brodie was disposed to believe that purulent depôts were

forming in some of the textures of the body, and considered the case as next to hopeless. He ordered the patient: Calomel gr. iv.; Op. gr. ss. pro pil. statim sumend. Haust. Senn. ʒi ss, post horas octo, et repetend. nisi prius responderit alvus. Empl. Canthar. capiti raso.

He was very noisy and delirious in the night, and on the 17th was worse. The yellowness of the skin was subdued in a kind of cadaveric hue; the teeth were dry; the mouth surrounded by herpetic eruptions; the tongue dry and red; the pulse exceedingly rapid and small. He had much pain on pressing the right hypochondrium; and some in the right side of the chest on breathing, which was short and hurried. No vomiting, nor any distinct rigor; bowels freely opened. Brandy was given; and the patient lingered out till the morning of the 18th, when he died.

Dissection.—The body had an uniformly yellow tinge. On cutting down upon the spine from behind, the spinous processes of the last dorsal vertebra and first lumbar were found to be separated at their apices for a full inch or more; the ligaments between them, as well as the ligamentum subflavum, uniting the bony arches from which they sprung, being torn across. The gap thus formed was the seat of a purulent depôt, extending transversely to the joint of the right articulating processes of the vertebrae above mentioned, and even beyond them, and dipping down to the surface of the theca vertebralis, with which it was in contact. There may have been about two or three drachms of pus.

On closer investigation, it was now discovered that the first lumbar vertebra was subluxated backwards from the last dorsal, their articulating processes on the right side being completely separated, the little capsule torn, and the joint laid bare and bathed in the pus of the abscess above described. The transverse process on this side was uninjured. On the left side, the displacement of the articulating processes was less; the joint was not fairly laid open, nor in contact with the matter; but the transverse process of the lumbar vertebra was broken off. The connexions of the first and second lumbar vertebrae were little, if at all, disturbed.

The body still lying on the belly, the arches of most of the dorsal and lumbar vertebrae were removed, and the state of the parts within was examined. A little, and but little, effusion of blood had taken place on the spinal sheath in the site of the injury. On opening the sheath, no pus nor marks of inflammation were discovered on the medulla, which was equally sound in its internal structure. There was no other mischief detected in the spinal column whilst looking at it thus from behind, but the traces of considerable extravasation remained in the soft parts and subcutaneous cellular membrane throughout the dorsal and lumbar regions.

On cutting through the integuments over the sternum, for the purpose of opening the chest, some very yellow gelatinous-like

serum was observed upon the bone, mingled with a little dirty-looking pus. There were some adhesions, most of them to all appearance old, between the pleuræ; but the lungs were sound. There were no purulent depôts in the liver, nor any thing in that viscus that could fairly account for the extreme tenderness felt during life on pressing the hypochondrium. There was scarcely a drop of urine in the bladder, and that afforded no satisfactory indication of its state, when tested by litmus and turmeric papers.

On prosecuting the examination of the spinal column from the front, a small quantity of pus was found in the loose cellular membrane over the first lumbar vertebra and behind the liver. The spinal column was cleared of the viscera, &c. when the displacement backwards of the vertebra in question was very perceptible indeed. The body of the bone was also found to have been broken transversely across, and splintered.

The head was opened, and the membranes presented marks of inflammation. There was fluid effused between the arachnoid and pia mater, and also to a considerable extent in the cells of the latter. The vessels of the membranes were very full of blood. There was no fluid in the lateral ventricles; no appearance of inflammation at the basis.

Prior to closing the report, we should mention that both arms had (what is commonly called) "festered" after bleeding: that is, the orifice itself had not healed kindly, though nothing like phlebitis had occurred.

This is an extremely interesting case, and bears upon some questions which are much agitated at the present moment. The yellow coloration of the skin was as strong as we ever remember to have observed it, and the symptoms altogether were remarkably similar to those which attend the formation of purulent depôts in various parts and tissues of the body. In all the instances, however, of visceral deposits (for example, in the liver or the lungs,) which we have observed, there have been rigors more or less frequent, accompanied with nausea and vomiting more or less severe. In this case, as we mentioned before, there were neither these symptoms nor the visceral deposits; a valuable fact, as tending not to shake our confidence in two of the most important items in our means of diagnosis. Perhaps it may be thought by some that the inflammation of the wounds of the veins of the arm played an important part: but we have fortunately (or unfortunately) seen too many of this melancholy description of cases, to believe that inflammation of the veins is a constant, or even a very frequent, concomitant; and much less a cause.*

* *Medical Gazette.*

MIDWIFERY.

Twin Case; Inflammation of the Womb, and of the Cellular Membrane surrounding the broad Ligaments; considerable Deposition of Pus in the Ovarian, the right Iliac, and the inferior Cava Veins. (HOSPICE DE PERFECTIONNEMENT.)

M. GUILLERY was sent for, on the 25th of December, 1828, about half past twelve at night, to attend Adelaide C. Blondeau, ætat. twenty-seven, in her first labour. Hemorrhage from the vagina had occurred; and examination showed that the os uteri was soft, elongated, yet not dilated. At three o'clock dilatation commenced; the pains followed each other quickly, and the membranes protruded. The patient was reduced to the lowest ebb of misery: the great fatigue she had undergone during pregnancy, the privations of all kinds she had suffered through poverty, and the anxieties to which she had been a prey, all concurred to make a tedious labour, and unfavorable consequences, matters to be feared; therefore it was proposed to remove her to the Hospice de Perfectionnement, where she arrived about eleven o'clock.

She was immediately put upon the labour bed. The membranes became more and more protuberant, and passed beyond the labia externa, notwithstanding the absence of pains. At six in the evening, the woman, tired of remaining in the same position, attempted to get up; but the membranes quickly gave way, and the waters were discharged. She was replaced on the bed; pains came on, and at nine P.M. a vertex presentation was evident; a strong contraction completely expelled a male child, of considerable size; the funis was then tied and divided as usual.

The abdomen of the woman remaining large, another examination was made, which ascertained the head of a second foetus: there was a little bloody discharge from the vagina. The uterus was again inactive. The ergot of rye was on the point of being given: the woman was, however, first made to walk about, and towards eleven o'clock the pains returned, became stronger and stronger; about midnight they followed each other rapidly, and a second infant was born, (a female.) To remove the afterbirth, traction was made on both cords at once. The placentas were separate; that of the last-born infant came away first, the other followed soon after. But little hemorrhage succeeded.

26th.—The patient is doing well. The uterus is large; the lochial discharge abundant. Broth for diet.

27th.—In the same state.

28th.—The milk troublesome; the breasts very large. Fever diet.

30th.—The fever remains. Breasts very large and very hard; the uterus a little contracted; abdomen large, yet not painful; parietes relaxed.—Let slight compression be made with a napkin for a bandage.

31st.—Lochia less.—Let poultices be applied to the abdomen

and upper and inner part of the thighs, and let them be renewed twice a day. Broth and diluents.

January 1st and 2d, 1829.—Same state.—Same prescriptions, with the addition of emollient clysters.

3d.—Patient quiet. In the evening the lochia ceased.—M. Guerseul had fifteen leeches applied to the labia externa; loss of blood estimated at twelve ounces in half an hour.

5th.—In the morning visit, the patient complained of pain in the iliac fossa, and said that she had suffered the like long before her accouchement.—Twelve leeches to each part in pain. The flow of blood was so great, that it was obliged to be stopped in the evening.

6th.—A little better.—Let her go into the warm bath for half an hour. Continue the cataplasms.—Abdomen tense; no stool. Haust. oleos. vespere.

7th.—Several evacuations from the draught. Repeat the clysters.

8th, vespere.—Pulse very frequent, 120; she has cough, which returns in fits, chiefly when she is sitting up.—Let her be bled to eight ounces.

9th.—Pulse less frequent; cough gone; countenance anxious, eyes haggard. Desired greatly to sit up, and remained half an hour in an easy chair. She has had a purging.

10th.—Delirious during the night; evacuations passed under her. She endeavours to get up, and at times is extremely impatient and ungovernable. The left upper eyelid and the nose are a little puffed, foreshowing that these parts will become attacked with erysipelas: this is thought a good sign, and it is not proposed to counteract its progress.

11th, in the morning.—Erysipelas develops itself slowly. The patient has rested little during the night; the fever is constant, and very high. She has lemonade for drink. She remained an hour in an easy chair, and will not lie down of her own accord. By the evening the erysipelas had increased; it occupied the whole face; but it is singularly contrasted with ordinary erysipelas, for the swelling is not accompanied with any redness.—Broth. Let poultices be applied to the back and to the soles of the feet; let them be slightly irritating.

12th.—She has passed a very restless night. She has been delirious, and says she has a thick veil over her eyes, which prevents her seeing the light. The progress of the erysipelas is not favorable.—Poultices to the calves of the legs; same drink.

13th.—Let blisters be applied to the inner part of each leg. The night has been more calm, although there has been delirium.—Let a free evacuation be obtained by clysters.

14th.—The night has been spent pretty tranquilly. She has passed several stools under her. Blisters risen well. Erysipelas confined to the lips and upper eyelids, of which the right can scarcely be raised. The leechbites in the iliac regions are deeply

ulcerated; the skin and cellular tissue are destroyed, and the aponeurosis may be seen. The circumference of the ulcerations is neither inflamed nor painful, which is an evil omen: they are dressed with lint and cerate.

15th and 16th.—Same condition. The thighs and legs are œdematous.

17th.—Pulse bad. Let blisters be applied to the inside of each thigh.

In the evening the extremities grew cold; and the patient died at five A.M. on the 18th.

Examination, thirty-six hours after death.—External appearances: General discoloration; ulcerations on the front part of the pelvis.

Internal appearances: Brain not examined.

Respiratory system: Larynx, trachea, and bronchi healthy; lungs crepitating, no tubercles; old adhesions of the pleura pulmonalis on both sides to the pleura costalis.

Circulating system: Heart and large vessels healthy; but the right iliac vein entirely filled with a solid white pus, which rose in the cava almost as high as the kidney: the internal surface of these vessels covered with false membranes. The ovarian veins equally filled with pus.

Digestive organs: Pharynx and œsophagus present no alterations; stomach pale and injected in patches, its mucous membrane not softened. The other organs presented nothing worthy of note.

Organs of generation: Uterus firmly contracted, lodged in the lower pelvis; the os almost entirely closed; the substance of this organ a little softened, as well as its internal membrane; the vessels which ramify within its walls contain no pus. The mucous membrane of the vagina reddish; both labia swelled.

Peritoneum: No adhesion observed between this membrane and the intestines; it does not appear to have suffered from inflammation.*

VICARIOUS MENSTRUATION:

Case of Vicarious Menstruation, treated at the HÔTEL DIEU.

A WOMAN, nineteen years of age, had been severely burnt upon the arm, the skin of which was nearly totally destroyed. The menses had been previously suppressed; and, for five successive months, a sanguineous discharge took place from the wound upon the arm, at the usual periods of menstruation. By the application of leeches to the vagina, and by attention to the injured surface of the arm, the hemorrhage was checked. A periodical mucous discharge from the vagina followed, but, at the time this report was made, the natural discharge of the menses had not occurred.†

* La Lancette Française, Feb. 1829.

† Journal Hebdomadaire.

WOUNDS OF THE CHEST AND ABDOMEN.

*Wounds of the Chest and Abdomen, for the purpose of Suicide ;
Recovery.*

PERSONS who attempt to commit suicide are frequently brought to the HÔTEL DIEU, where a portion of one of the wards (Saint-Bernard) is set apart for them.

CASE I.—An individual was admitted February 26th, who had wounded himself by inflicting two stabs in the left side of the chest. His actions were controlled; the wounds (from which the blood flowed freely) were brought together, and he was bled in the arm. In half an hour, the difficulty of breathing having increased, a second venesection was employed, and a cupping glass applied over the wounds, by which means a large quantity of blood was removed. The wounds were again closed, and the patient was brought to the hospital within a few hours after the receipt of the injury. He was about forty-six years of age, a tailor, of middle stature, and rather robust, but without any thing in his countenance indicative of remarkable energy. On his admission, he was in a state of depression; the pulse feeble; almost the entire left side of the chest painful on pressure, but without any emphysema or obvious effusion of blood; the respiration was slow but regular, without cough or spitting: in short, there was no evidence of the lungs having been wounded. The patient became calm, and by the 10th of March (when the report is dated) the recovery was almost complete.

CASE II.—A man, aged fifty-six, large and robust, having been arrested at the moment when he had stolen some money, seized a knife, placed the handle of it against the wall, and the point towards the epigastrium, and threw himself upon it. He fell. A practitioner was called, who brought the lips of the wound together, and bled him from the arm: two hours after which he was received at the Hôtel Dieu.

The skin was uniformly yellow, the eye haggard, and the countenance animated. The wound was transverse, about six lines in breadth, and, according to the practitioner who had first seen the patient, it was from an inch and a half to two inches in depth. There was nausea, but no vomiting; the pulse quick and hard; the entire circumference of the wound extremely tender to the touch. In the evening, as this last symptom continued, fifteen leeches were applied to the part; and in other respects the treatment consisted in diluents, cataplasms, and a strait-waistcoat. On the 10th the wound was nearly healed; but the pain continuing, the leeches were again applied; and once more on the 14th. On the 20th the patient was discharged, apparently hypochondriacal.

These cases are related, and others are referred to, with a view of showing that persons who attempt to commit suicide in consequence of some sudden impulse, as after the perpetration of a crime, seldom have resolution or coolness enough to secure the accomplishment of their object.—*La Clinique.*

CRITICAL ANALYSES.

Quæ laudanda forent, et quæ culpanda, vicissim
 illa, prima, cretâ; mox hæc, carbone, notamus.—PERSIUS.

A Treatise on Obstructed and Inflamed Hernia; and on Mechanical Obstructions of the Bowels internally; and also an Appendix, containing a brief Statement of the Cause of Difference in Size in the Male and Female Bladder. By HENRY STEPHENS, Member of the Royal College of Surgeons.—8vo. pp. 191. E. Cox, London, 1829.

MR. STEPHENS informs us that the present volume originated in the following manner: A case accidentally fell under his care, which exhibited certain symptoms and features not altogether corresponding with those ideas and that information which he had derived from the best authorities. Hence arose in his mind a train of reflections and inquiries, which have proved highly instructive to himself, and which he trusts may be useful to others if more publicly known. The paucity of cases in illustration of his doctrines which the author has given in his work, arises not from want of corroborative materials, but from an unwillingness to increase the size of his book.

It has not been the purpose of Mr. Stephens to write a complete treatise upon the subject of hernia generally, but only to supply what his investigations have induced him to believe were important omissions or defects in the works of previous authors, and to describe some varieties of the disease which have not yet been noticed. This work may, therefore, be considered as an appendage to existing treatises upon hernia.

The first division of the volume treats of "*Obstructed Hernia.*" Long-existing and irreducible hernia, says the author, produce many remarkable and painful symptoms, and even death, from a cause which it is in the power of surgery to remove by an operation, when the true nature of the malady is well understood. A remarkable case of this kind came under his care, in which an operation was successfully performed, "although it was one of those cases which have not been considered as requiring it, no strangulation existing."

The patient, a woman, was attacked with sickness and pain in the bowels. She was at first suspected to be threatened with cholera, which was then prevalent. For several days she had no motion, although aperients and injections

were freely employed. After this time the matter vomited had a fecal appearance, with a very offensive smell. There was no tension, and but a slight soreness of the abdomen. The croton oil was given: this, however, like all the other aperients, only increased the vomiting. She said that she had no rupture. On the fourth day her countenance began to exhibit signs of sinking, and the pulse was getting feeble and fluttering. These symptoms slowly, but progressively, increased. A week after the author first saw her, she slightly mentioned a swelling on the side of the abdomen, which had existed twenty years. It was found to be a ventral hernia, having upon its surface an old cicatrix. It was evidently not strangulated. It was not tense nor painful upon pressure. It receded under the touch, and passed readily into the abdomen with a gurgling noise, but returned when the pressure was removed. The pain was not of the character which indicates strangulation of a portion of intestine. The symptoms were not, therefore, referred to the hernia. She continued sinking, had occasional faintings, hiccup, and still stercoraceous vomiting. She had been long subject to a complaint in her bowels, which had been thought to be colic. Reflecting upon the history of the case, Mr. S. concluded that the symptoms, although not those of strangulated hernia, were yet such as would be produced by any permanent and mechanical obstruction in the bowels, and that it was highly probable that the obstruction was in that portion of the bowel which was contained in the hernial tumor. He therefore determined to cut into the hernial swelling, and examine the condition of the parts, and thus see if relief was possible. With some difficulty the patient consented to the operation. Mr. S. divided the integuments, which were very thin, by a crucial incision, and afterwards a superficial fascia, with some cellular structure. The hernial sac was now exposed and opened freely. A portion of small intestine was found within, which was irreducible; another portion being loose, and readily passing into the abdomen when pressed upon. The small irreducible knuckle of intestine was adhering very firmly to the hernial sac, and in a position which at once accounted for the previous symptoms. It was so closely united by adhesions to the hernial sac as to obstruct, to all appearance, its peristaltic action, and prevent the due course of its contents. There was no stricture; for the operator easily passed his finger into the abdomen by the side of the intestine, which was somewhat discoloured. The bowel was relieved from its adhesions to

the sac, and pushed into the abdomen; the finger being passed in and around the opening on the inside, to determine that there was no further adhesion. The wound was then sawed up. The patient did not feel that immediate relief from the operation which is experienced in cases of strangulated hernia. The first favorable symptom that occurred was her swallowing some liquid, without vomiting being produced, which had not been the case before the operation. In two hours she passed some fecal matter from the bowels, for the first time since her illness, and the hiccup had much abated. Her countenance was less anxious; pulse still low and fluttering; less sensation of sinking. She continued for three days slowly improving. On the third day she had copious motions, from aperient medicines: the pulse after this immediately began to rise, the sense of sinking almost instantly went off, and she rapidly recovered.

"The necessity, or at least the utility, as Sir Astley Cooper has always indicated, of freely purging a patient after an operation for hernia, is in this case remarkably shown: the sense of sinking, and the alarming depression of the vital powers, are the effect of a suspension of the natural function, and, until there is a resumption of the peristaltic action, the patient does not thoroughly revive. The administration of a brisk purgative, and a copious evacuation from the bowels, appeared almost instantly to remove the sense of sinking and depression of the pulse: yet I should think the restoration of the function of the bowels is always quicker after an operation for strangulation, than after an operation for what I call 'obstructed hernia,' because in the former the previous suspension will have been of shorter duration." (P. 8.)

The slow progress and less degree of violence of the symptoms in the case related by Mr. Stephens, prove that it was not one of strangulation. He believes that fatal consequences from adhesion of the bowel to the hernial sac are by no means uncommon, particularly in umbilical and ventral hernia. To confirm the propriety of giving purgatives after the operation, the author adduces the opinions of Sir Astley Cooper. It is of the utmost importance that *such* authority should not be imperfectly quoted. It is true that Sir Astley does recommend purgation after the operation, but he couples this advice with a very important caution, which Mr. Stephens should not have omitted. In speaking of the treatment after the operation, Sir Astley says,* "You order the patient to keep the horizontal pos-

* Sir Astley Cooper's Lectures on Hernia.

ture, but, above all, direct that the evacuations are passed on foul linen, and that he be not allowed to get up. If strict orders be not given to this effect, the patient will get up to go to stool, and great mischief will most probably be done by the exertion. Mr. Cline operated upon a patient in this hospital (St. Thomas's) for strangulated hernia, and the parts were returned to the abdomen; but the patient got out of bed a short time after the operation, and, when on the close stool, the parts descended into the sac, and displaced the dressings. Mr. Cline was sent for, who found the hernia as large as before the operation. He reduced it, and ordered that the patient should not quit his bed. I mention this case to point out to you the necessity of enjoining the horizontal posture."

Mr. Stephens mentions another case, still further to strengthen the opinions he derived from that of which we have given an abstract. The symptoms in this instance were somewhat obscure. There was pain in the abdomen, vomiting, and obstinate constipation. Purgatives and injections were employed without avail. Still no danger was indicated.

"I conjectured this to be a similar case to the one before mentioned, and immediately inquired if she had been previously subject to pain of the bowels, or colic, after taking her meals? To this she replied in the affirmative, which was also attested by her attendants, who informed me that she had often been obliged to leave the table from pain in the bowels. She had never, to her knowledge, been the subject of rupture. I then proceeded to examine the abdomen, the integuments and parietes of which were loaded with fat. I examined carefully every part, and found various prominences from accumulations of fat; but at one part, a little below the umbilicus, one of these prominences appeared larger than the rest, and somewhat different to the touch, but conveyed no certain indication. The professional gentleman in attendance soon after came, and gave me privately a history of the case from the time of his being called in. I inquired, without informing him what I thought, his opinion of its nature. He considered it a kind of inflammation of the bowels, but at the same time said it did not present the symptoms of genuine enteritis. He had considered the case as one of somewhat unusual character. I then gave my opinion that it was a case where, if we could discover the proper part, an operation would relieve; and I told him the case I had formerly had, and my reasons for supposing this to be similar." (P. 141).

It was agreed that an operation would not be justifiable without further evidence of the precise nature of the case. It was doubtful even whether hernia existed, and as yet

there was no immediate danger. Four days after Mr. S. first visited the patient, the matter vomited was feculent. Every thing was thrown from the stomach, and no evacuation could be procured from the bowels, and the use of aperients was given up, as they only increased the vomiting. Injections were tried, and endeavours made to calm the irritability of the stomach by anodynes. Although the patient was evidently sinking, the symptoms were not immediately alarming. An operation was proposed. The patient and her friends were anxious to delay it, and it was determined to operate the succeeding day, if no amendment took place. She was then, however, in a state which precluded all hope of saving her. The author thus describes the dissection of the case.

“ I explained to my colleague that I expected to find the bowels confined by adhesions, in some position unfavorable to the passage of its contents. I accordingly cut down upon the part where I supposed the hernia, if any existed, would be found; and, after dissecting, with the assistance of my colleague, to a very considerable depth, through cellular structure and fat, discovered the sac of a hernia: upon cutting through this, a circumscribed cavity was seen, containing at the bottom a small portion of intestine. Upon passing my fingers into this cavity, I found a canal leading from it obliquely towards the umbilicus; I passed my finger along this sinous canal, by the side of the intestine, and at length through the umbilicus, into the abdomen. Here, then, was a hernia, which had caused death without any stricture or strangulation. The portion of bowel which had escaped the umbilicus, and insinuated itself obliquely under the fat and integuments, was closely adhering to the sac, and doubled upon itself, so as effectually to obstruct its peristaltic action and the passage of its contents. After we had satisfied ourselves that no stricture existed, and that the cause of death was simply a mechanical obstruction, we separated the bowel from the strong adhesions by which it was held, and passed it readily into the abdomen. We then opened the abdomen, and examined the intestines, and found that portion which we had just returned of a dark colour, but not in the least gangrenous. The intestinal canal leading from this portion was discoloured for three or four inches, but much less so than the part itself. The bowels generally exhibited no marks of inflammation, nor did the peritoneum. My colleague was now, as well as myself, perfectly satisfied that if the patient and her friends had consented to an operation the day previously, her life might have been saved; and also that death from adhesions of the bowels in hernia may take place, as surely as from strangulation.” (P. 18.)

In reading the account of the dissection in fatal cases of hernia after operation, the author has often noticed,

amongst other morbid appearances which have been detailed, that there were found adhesions of the bowels, and that a knuckle of intestine is often described as so adhering.

"In operating for strangulated hernia, therefore, the surgeon should not consider that he has done all that is required when he has divided the stricture: he ought not to return the bowels until he is satisfied that they are so freed from their adhesions that, when returned into the abdomen, they will be capable of resuming their functions. Upon this principle I venture to differ from Sir Astley Cooper, who directs, in the operation for large hernia, that the stricture should be divided without opening the sac. If the symptoms are such as to leave no doubt that they are caused by a stricture solely, then the above proceeding is certainly preferable; but as I believe that in many of these cases dangerous adhesions exist, I cannot avoid recommending that the sac should, in all doubtful cases, be opened, the state of the parts within examined; their adhesions, where it is practicable, removed; and the contents of the hernia, if possible, returned into the abdomen." (P. 20.)

It cannot, we must observe, be doubted that Sir Astley Cooper would open the sac "in all doubtful cases;" for he particularly remarks, in his *Treatise on Hernia*, that he has known a fatal obstruction to the passage of the intestinal matter to arise from the mere adhesion of the two sides of a fold of intestine together. It is now, indeed, well understood that every preternatural connexion should always be separated before the viscera are reduced.* In the case of John Harris,† which is related in our *Journal*, in which Mr. EARLE operated, it is expressly stated that the protruded intestines were inseparably connected with the surrounding parts. In commenting upon this case, Mr. Stephens remarks that he does not consider that any blame can reasonably attach to Mr. Earle, "the existing knowledge upon the subject not having distinctly shown that symptoms resembling strangulation can be caused by adhesions only, and that relief can be given by a simple separation of the adhering surface." The fact is, that neither Mr. Earle, nor the "existing knowledge" at the time, can be complained of. If Mr. Earle *could* have separated the adhesions of the intestines from the surrounding parts with safety, he would of course have done so, in compliance with the admitted principle, to which we have before referred, of separating *every* preternatural connexion, if possible. We recommend Mr. Stephens to read once more Mr. Earle's detail of Harris's case. He will find that Mr. E. came to

* Lawrence on *Hernia*, p. 153, first edition.

† London Med. and Phys. Journal, Nov. 1827, p. 417.

the same conclusion that he does, namely, that it was a case where the adhesions and morbid connexions of the parts produced a total obstruction of the natural function and action of the bowels."

As the author has introduced this case for the express purpose of entering into a critical examination of it, he ought not to have abbreviated it. The impression that would be created as to Mr. Earle's opinions of Harris's case, from the account which he has himself given, must be very different from that which would arise from the perusal of the imperfect abstract given of it in the volume before us. The author states "that the division of a stricture is supposed to be all that is positively required in the operation for hernia, may be collected from all authors who have written upon the subject." And again he observes, "*I believe that two causes of danger may exist at the same time, namely, stricture and adhesions, and that, unless both are attended to, the safety of the patient is not ensured.*" Now, the division of a stricture is *not* supposed to be all that is required; for, as we have already stated, the surgeon has long been taught to make it a rule to destroy every preternatural connexion before he returns the part, because the "two causes of danger," namely, stricture and adhesion, were well known, and their importance duly appreciated.

"*On Inflamed Hernia.*"—The contents of a rupture are said sometimes to become inflamed, in connexion with an inflammation of the bowels generally, and totally independent of any cause arising from the rupture. Mr. Stephens believes such instances are rare.

"These inflammations, I believe, are almost always generated by the morbid condition of the parts within the rupture, and afterwards becomes quickly communicated to the interior of the abdomen. Large irreducible herniæ, more especially umbilical, are those in which this form of disease mostly occurs, which appears to partake more of the character of enteritis than of ileus. A small portion of confined intestine, however intensely inflamed in itself, does not so necessarily or so quickly communicate its disease throughout the abdomen, it being of comparatively local origin; but, when the contents of a large hernia become inflamed, as a sequel (I believe) of various chronic confinements and changes of structure in the parts, the disease from the first will be of a more diffused and general character, and will more extensively and quickly communicate with the interior.

"Although large irreducible ruptures are those in which disease and inflammation, independent of mere mechanical obstruction, are most likely to arise, yet small irreducible ulcers are also very subject to this form of complaint, particularly omental, or those

wherein omentum is contained. The omentum is subject, in its unnatural situation, to become thickened and diseased, and to suppurate. The hernial sac will also often inflame and suppurate. The appendiculæ epiploicæ of the colon will also occasionally undergo some alteration of structure, when confined within a hernial sac. All these various changes and states of disease become a frequent source of inflammation to the contiguous bowels or peritoneum. The inflammation which is thus produced is attended by an obstinate obstruction and symptoms of general inflammation throughout the abdomen, and is generally fatal in its consequences. When the herniæ are small, the inflammation of the rupture, denoted by pain, soreness, and tension of the part, so clearly precedes the inflammation of the abdomen, that the case is usually mistaken for strangulated hernia; and, if an operation is performed, the tension which the parts have acquired fills up the opening through which they have descended, and favors the mistaken opinion of the existence of a stricture. When the herniæ are large, the inflammation of the abdomen and of the hernia are very often nearly simultaneous, and if, upon operating, there is found a palpable absence of stricture, then the hernia is supposed to be merely participating in a general inflammation of the intestines. The want of success attending operations upon large herniæ, particularly umbilical, is attributed to the direct exposure of the peritoneal cavity, by which a dangerous inflammation is excited. I believe that the inflammation which destroys the patient is, in the majority of cases, altogether established before any operation is attempted." (P. 68.)

Cases of unsuccessful operation for hernia are, in the author's opinion, very frequently of the above kind.

At pages 36 and 37, part first, of Sir Astley Cooper's work, a case is related, which appears to Mr. Stephens to be of that kind which he terms inflamed hernia.

"A woman was admitted (into Guy's Hospital, 1803,) with three herniæ, two in the groin and one at the navel. The umbilical hernia and that of the left groin were irreducible; that of the right groin felt extremely sore upon pressure. A doubt arose which was the hernia that required the operation; but, as the symptoms of strangulation were not extremely urgent, though the woman was very low, it was agreed to wait till the next day for a consultation. During the night, however, she died, and, upon inspecting the body, the tumor in the right groin was found to be an enlarged and inflamed absorbent gland, lying over an empty hernial sac. In the left groin was a portion of inflamed intestine; and at the navel was an irreducible omental hernia, which had suppurated, and contained about a tablespoonful of matter."

"This woman complained chiefly of pain in the right groin, and if the operation had been performed, this would have been the tumor laid open. This case also furnished another observation:

though this woman had several herniæ, yet the operation, on whichever it had been performed, would have given no relief, as she died, not of strangulated hernia, but of peritoneal and omental inflammation. When the abdomen was opened the intestines were found adhering to each other, with matter interposed in some places; and a considerable quantity of pus had been effused into that part of the omentum which was contained in the cavity of the abdomen. In this case, therefore, the abdomen was first affected, and the inflammation, after having extended through it, was continued to the protruded parts. Soreness of the abdomen, therefore, which in strangulated hernia is a late symptom, must here have been one of the earliest." (P. 72.)

The author thinks there can be no doubt that the above was not a case of strangulated hernia, but one of peritoneal and omental inflammation; but he does not agree with Sir Astley in supposing that the abdomen was first affected: on the contrary, he believes that the herniæ generated the inflammation, which was communicated quickly, or otherwise, according to circumstances, to the interior of the abdomen.

"In inflamed hernia, the viscera of the abdomen are very extensively inflamed throughout. In obstructed hernia, very slight traces of inflammation are in general visible after death. Cases of strangulation are of an intermediate kind; the inflammation being almost wholly confined to the seat of stricture and the parts above it, the intestines below being in a state of collapse and uninfamed.

"An empty hernial sac is not unfrequently, by becoming thickened and diseased, a source of inflammation to the bowels and peritoneum; but I have reason to believe that the inflammation so produced is not generally so extensive or so fatal as when intestine is contained within. Coagulable lymph or pus forms within the sac. If the former, adhesive inflammation only has prevailed, and the patient will not unfrequently recover. When pus has formed, the case is more dangerous. An operation appears to do good, by giving exit to any pus or fluid which has been secreted." (P. 89.)

Treatment of hernia.—Mr. Stephens believes that, in general, before the actual protrusion of a rupture, there are some sensations which indicate a disposition to it.

"The patient feels at that part, during the action of the abdominal muscles, more especially in evacuating either the bladder or the bowels, a sort of bulge or pressure of the intestines, more on one side than the other, and which bulge becomes gradually a more distinct sensation. In this state of the disease I believe that its further progress may often be checked. I should recommend the person so affected to wear a belt round the lower part of the abdomen and loins, which belt should be supported by straps over the shoulders, in such a manner that the abdomen may be sup-

ported or lifted up: at the same time, care should be taken that no part of the dress is worn tight round the upper part, so as to press the contents against the situation of the threatening hernia.

"Where hernia has actually occurred, the patient should in due time make use of a truss, and, by attention to its proper adjustment and constant application, prevent, if possible, the hernia ever protruding. It should be impressed upon the patient's mind that a rupture produces no injury if it is kept from descending, but that, if it is suffered to remain down, it may become strangulated, or may contract adhesions and become irreducible." (P. 91.)

We fear the preliminary symptoms of hernia are not sufficiently indicative of the nature and importance of the threatened evil to induce the patient to apply for surgical advice, without which the proper precautionary mode of treatment will not be adopted.

When a rupture has become irreducible, the patient must endeavour, if possible, to prevent its further increase. Every contrivance in the shape of a truss, to make pressure on the ring, must be particularly avoided. An elastic bag truss will form the most proper support. "It should be so contrived as to close upon and grasp the lower part of the tumor, by which means it will lessen its bulk by promoting absorption, and render the protrusion of fresh parts more difficult. Care must be taken that the bandage makes no circular pressure round the neck of the tumor, as to contract this part would endanger the occurrence of strangulation, and give a disposition to unfavorable adhesions and ultimate obstruction." The patient should also, by exercise and moderate diet, prevent accumulations of fat. In the early stages it is probable that, by confinement in bed and spare diet, with pressure on the base of the swelling by an elastic bag truss, an apparently irreducible hernia may be reduced.

"Instances have occurred, and are related by most writers, where, from confinement to a bed from other causes, herniæ, which have been previously irreducible, have of themselves gone up; particularly scrotal herniæ.

"When a person has an irreducible rupture, which has given indications of a tendency to obstruction, by producing pain after eating, &c. great attention to diet is required. The food should be well masticated, and so reduced and divided as not to be likely to obstruct the passage from its solidity or size. The food taken should be as much as possible of a fluid nature, as animal broths, soups, &c.; also light puddings. New bread, indigestible fruits, &c. should be avoided. When obstruction of the bowels has occurred, it is not at once to be considered as irremediable, because many temporary impediments to the passage of the feces

occur before a total obstruction is established. Sir Astley Cooper says, 'umbilical hernia often has symptoms of strangulation, subsiding and returning.' I should rather say, symptoms of obstruction. These states of disorder may very frequently be removed by mild laxatives, as the saline purging salts, &c. Calomel and opium, by quieting the disturbance of the intestines, will facilitate the passage of the contents. Bleeding and warm bathing would without doubt be serviceable in allaying the irritation. The successive returns of these symptoms are generally of increased severity, and at length a total obstruction takes place, which resists all the usual means, and leaves the surgeon no other resource than an operation to remove the adhesions and return the bowels." (P. 93.)

In old large herniæ, which are irreducible from want of space in the abdomen, and which are the subject of inflammation, the author does not promise benefit from operating, but he says,

"If a case were to arise in my practice of the contents of a hernia, irreducible from a state of adhesion only, becoming inflamed, believing as I do that such inflammation is produced by, or depends upon, certain morbid conditions and connexions of the parts in the rupture, I should not think I fulfilled my duty to my patient unless I proposed (upon the failure of other means) an operation to render the hernia reducible.

"Most surgeons will probably prefer to place their dependence upon bleeding and measures of general depletion, but I cannot conceive that such means ought to be relied on, while the cause which generated the inflammation still remains unrelieved. When the preternatural condition and connexion of the parts within a rupture is in some degree removed, then depletion may produce some salutary effect. In the opinion of most surgeons, cutting into parts already in a state of inflammation would be the most likely way to increase it; but I do not think that this is by any means a necessary consequence. Where there is determination of blood to a part, incisions, as is the case in erysipelas, have a tendency to relieve. But, admitting that operations upon a part in a state of inflammation have a tendency to aggravate such disease, yet I think it brings the parts into such a state as will allow of relief: whereas the other alternative resigns them to struggle against impossibilities. Who would refuse to operate upon a strangulated hernia, from an apprehension of increasing the existing inflammation? Do we not know that, by removing the cause, we take the most effectual way of subduing the effect? And, although I believe the chance of success is much more remote in cases of simple inflamed hernia, than in cases of obstruction or of strangulation, yet I think that cases may be selected where an operation would be effectual.

"The cases where it might be successful would be those in which

the herniæ were not of extreme size, and admitted of reduction easily after the adhesions were separated. The earlier, too, the operation was resorted to, the greater would be the chance of success." (P. 97.)

The author does not conceive there would be much difficulty in distinguishing inflammation of the bowels, which commenced internally, from that which commenced in a hernia: "the pain, swelling, and tension would be in the belly, and not in the rupture, or at least not until a late period; while, in inflamed hernia, these effects would be primarily and principally there."

Mr. Stephens' proposal "to make an immense artificial hernia," to prevent inflammations and obstructions in large irreducible umbilical herniæ, is not likely to be adopted.

In the next section some remarks are offered respecting an operation for returning an irreducible hernia, and "a probable method of radical cure" is proposed. Mr. Stephens says, that "operations upon hernia are not considered necessary or justifiable by surgeons of the present day, unless strangulation has occurred." This statement is not correct. Strangulation is considered the most common, but *not* the only, cause for operating. The following extract from an excellent article upon hernia, by Richerand,* is sufficient to show that Mr. S. is mistaken upon this point. Abundant evidence might be brought from English and foreign writers to prove that the practical point to which the author alludes has not been, as he imagines, overlooked or entirely neglected. Richerand, in speaking of the symptoms arising from intestinal obstruction from the accumulation of fecal matter in the protruded gut, remarks, "Au moment où les symptômes de l'inflammation se joignent à ceux de l'engouement, la tumeur devenant tendue, rénitente et douloureuse, *l'opération se trouve positivement indiquée et tout retard devient funeste*. Avant de dire comment on y procède, parlons de l'étranglement; c'est la cause qui, *presque toujours*, rend cette opération nécessaire."† Richerand thus clearly defines the distinction between obstruction and strangulation:§ "Dans l'engouement *il n'y a point* étranglement, ou constriction exercée par l'anneau sur la portion d'intestin à laquelle il donne passage: il n'existe pas de disproportion entre cette ouverture et les parties qu'elle embrasse. Bien plus, l'engouement s'établit l'anneau restant dans un état remar-

* Dict. des Sc. Med. tome 21, art. HERNIE.

† Loc. cit. p. 142.

§ P. 144.

quable be dilatation et de relâchement, sur des vieillards affligés de hernies anciennes et volumineuses."

We believe that, amongst the general body of the surgical world, many of whom are imperfectly acquainted with operative surgery, there may be an opinion that strangulation is the only cause which can render an operation necessary; but every well-informed practical surgeon is quite as well aware as Mr. Stephens that occasional exceptions are sometimes met with. He, perhaps, would operate earlier in cases of "engouement," or "obstruction," than other surgeons; and upon this point his remarks appear very judicious.

"If a patient with irreducible rupture should be troubled with frequent and considerable intestinal derangements, as vomitings, colic, and pain after taking meals, with frequent obstructions of the bowels, which symptoms appeared to be gradually increasing in violence, I should consider such a state, although not indicating any immediate danger, yet as infallibly denoting such a state of adhesion and change of the parts contained within the rupture as to believe that the time was not far distant when an operation would be absolutely necessary to save the patient from falling a victim to a mechanical obstruction. Under these circumstances I should think it right to propose an operation, which would have the effect of permanently relieving those painful symptoms, and of removing from him an impending danger." (P. 106.)

In performing an operation for the relief of an irreducible adherent rupture, many circumstances require to be duly considered,

"and a degree of selection with regard to the particular case is necessary; for, if an indiscriminate recourse to an operation in irreducible hernia were ever to become a general practice, its want of success would soon bring it into discredit and disuse. The peculiar success which has attended some surgeons in their operations, has not arisen so much from superior skill in operating, as from a more judicious selection and consideration of the particular case requiring it. If the hernial swelling is of great bulk, and it is probable that, when the adhesions are separated, the hernia could not be returned, from the want of capacity in the abdomen to receive it, or from the morbid alterations which it has undergone, the operation should not, except from a certain and immediate apprehension of the loss of the patient's life, be attempted. But if the hernia be small, and be in part reducible, and yet give rise to symptoms of increasing derangement and obstruction, then the operation will be justifiable, and will afford the fairest prospect of success." (P. 109.)

To effect a radical cure, Mr. S. proposes an operation, differing in a very essential point of view from any hitherto

proposed, and which he believes affords more probable grounds of answering the intended purpose. He has performed it upon the brute subject with complete success, and he infers it would be equally successful in the human.—The following is an abridged account of the proposed operation:

A friend of the author's had a pointer bitch, the subject of an enormous hernia, which, from its size and weight, rendered the animal nearly useless. Mr. S. began by reducing the condition of the animal, as he foresaw that the less superfluous fat there was upon the omentum and in the interior of the abdomen, the easier would the parts be returned and retained. The operation was begun by feeling for the opening through which the intestines protruded. It was found in the situation of the inguinal ring. An incision was begun directly over it, carrying it about half-way down the surface of the tumor, and through the integuments. A quantity of fine cellular structure was then cut through, and the hernial sac opened: omentum and intestines were found within. The parts were drawn up from the bottom of the tumor, and pushed with the finger through the opening into the abdomen. One considerable portion did not admit of reduction, owing to its strong adhesions below. It was the omentum and one portion of intestine only which were returnable; another portion, being firmly connected to the parts out of the abdomen, had never admitted of reduction. Mr. Stephens proceeded by inverting the hernial tumor, by which means he could see the whole irreducible part of the intestine, without the necessity of laying the sac open to the bottom. The bowel was not simply adhering to the hernial sac; its coats were absolutely incorporated with it, having no line of separation. To attempt, in this case, to dissect the bowel away from the sac would have been hazardous; but it occurred to the operator that he could separate the sac from the integuments, &c. forming the hernial pouch, to which it had become closely joined. He succeeded, and returned the intestine and sac into the abdomen, adhering as he found them. The opening from the abdomen was so considerable, that, unless the finger was constantly there, the parts protruded. To retain the bowel in the abdomen was now the difficulty. A bandage was of no use, and the object was to obtain a radical cure by effectually closing the abdominal opening. The parts were prevented from protruding by the quilled suture, substituting for quills pieces of wood. The immediate

return of the hernia was thus prevented; and the remaining part of the wound was closed by sutures. The pressure of the quilled suture upon the vessels of the thigh obstructed the passage of the returning blood, and caused cedematous swelling to some extent in one limb. Incisions relieved this symptom. At the end of four or five days, the sticks and ligatures were removed. The animal now rapidly recovered. The operation was performed in August, and the bitch was used during the shooting season of September, and proved equal to any exertion.

The radical cure in this case appeared to be owing to the return of the hernial sac. It was separated from a very close adhesion to the hernial pouch, and it was returned in this state of recent separation into the abdomen, ready to attach and unite itself to any surface to which it was opposed. By its inclination to descend again, it was, although kept in the abdomen, closely applied to the abdominal ring, over the interior of which it without doubt closely adhered, and thus completed, in an unexpected manner, the radical cure.

From the success attending this really interesting case, the author recommends that, in all cases, the sac should, if possible, be returned, to give a better chance of radical cure. By leaving the hernial sac, a direct channel of communication is preserved between the abdominal cavity and the situation of the hernia. By returning it, besides the probable chance of its adhering over the ring, and thus effectually closing it, we produce a somewhat broken communication between the exterior and interior parts. Care should be taken to keep the patient in such a position that the returned bowels, with the sac, may be applied over the interior of the abdominal ring, at the same time that a fresh descent of the parts is sufficiently guarded against.

In the other sections, Mr. Stephens treats of mechanical obstructions of the bowels within the abdomen, and of the symptoms denoting such obstructions, and the probable signs distinguishing their different varieties and situations. The treatment in the early stages of mechanical obstruction of the bowels is also considered.

A few brief remarks on the cause of the difference in size of the male and female bladder, terminate the volume.

Mr. Stephens may fairly claim the merit of having achieved the object he had in view, of giving a useful appendix to the more general and elaborate treatises on Hernia. There is certainly, however, much less of novelty

gine. It is proper, however, to add, that many practical points are by him definitely determined and ingeniously commented upon, which, although not neglected by previous writers, had been but imperfectly considered.

A Preliminary Dissertation, illustrative of a new System of Pulmonary Pathology, supported by a Series of conclusive Physiological Experiments; combining a rational Theory with a successful Method of conducting the Cure of Consumption. By P. P. P. MYDDELTON, M.D. &c. Author of a Treatise on the Diagnosis and Prognosis of Diseases, an Essay on Gout, and Clinical Reports of Select Medical Cases, with Practical Notes. —8vo. pp. 95. Bath. Baldwin, Cradock, and Joy, London, 1825.

It appears that this preliminary dissertation was delivered by the author, as a lecture, some years ago, in America, and that the practitioners of that country thought very highly of its doctrines. It gives us a brief outline of the author's theory, and a description of the practice which is founded upon it, as well as a concise view of his arrangement of pulmonary consumption under five distinct heads, with some reference to collateral considerations of great practical importance. The arrangement proposed by Dr. M. of pulmonary consumption is as follows:

"1st. The hereditary or constitutional disease, arising from causes of remote origin.

"2dly. The acquired disease, as communicated to persons in the full possession of health, who are not predisposed to pulmonary derangements.

"3dly. The primary disease in combination with other visceral affections.

"4thly. That modification in which the digestive organs are the *primary*, and the pulmonary organs the *secondary*, or sympathetic source of morbid action, which may be truly termed *dyspeptic phthisis*.

"And, lastly, That form of the disease which may be produced by *casual causes*." (P. 4.)

In this classification is included those catarrhal affections arising from inflammation of the larynx and mucous membrane of the bronchial tubes, which often assume all the external characters of confirmed phthisis: "and so indeed with chronic inflammation of the pleura; for that membrane undergoes a progressive change of structure, from a simple effusion of lymph, until, by continued depositions and thickenings, it acquires the vital property of exhalation, and often terminates in empyema."

This passage includes an error both of theory and fact. The pleura does not "acquire" by disease the "vital property of exhalation." In common with all other membranes, a vapour or fluid is constantly exhaling from its surface in a healthy state. From inflammation of the pleura, pus may be thrown out, and the disease termed empyema be formed; but in this morbid process no vital property is "acquired:" the natural functions of the part are merely changed.

"Hereditary or constitutional consumption is, by much, the most prevalent form of the disease, and the product of a strumous diathesis, generated, for the most part, by past generations, and by various causes. It is, nevertheless, a fact of practical notoriety that we occasionally meet with patients, at different periods of life, affected with scrofulous tumors on the external surface; while we meet with others who exhibit strongly-marked symptoms of phthisis pulmonalis, without being able to trace the origin of either disease to any relative source. I must, however, remark, that even a change of location, from an elevated country and pure air to the exhalations of a low marshy situation and humid atmosphere, by deranging the gastric secretion, and impairing the energy of the digestive functions, will induce defective absorption of nutritious particles of food from those organs; a consequent flaccidity of the muscular fibre; and predispose persons so situated to glandular obstructions, which an impoverished diet, impure water, and mental anxiety would still further increase. In corroboration of this opinion, I can state, from my own personal observation, the fact that several English and Scotch families of my acquaintance, who had removed to Holland with commercial views before the revolution, in a few years became martyrs to scrofula, from the operation of causes already recited; for they had previously exhibited no symptom of glandular or cutaneous disease: and it is worthy of being recorded that the junior branches of those families were the least sufferers by that disease until they had approximated to the age of puberty; they then became affected with glandular tumors, or chronic pulmonary disease, and in some instances both existed at the same time, and were simultaneous in their progress: the majority of cases, however, it must be admitted, were purely scrofulous. I am, nevertheless, quite aware that the converse of those appearances is more usual in the real hereditary scrofula, where we often see the disease exhibit itself in early infancy. From a residence of several years in Ireland, with ample opportunities for observation, I have remarked that her population is more subjected to scrofula and pulmonary consumption, even in the more elevated ranks of life, than any other section of the united kingdom with which I have had intercourse; and I am led to infer that we may trace the cause of the calamity to the extreme humidity of the atmosphere, occasioned

by the exhalations from the numerous large lakes and extensive bogs with which that hospitable and fruitful country abounds; and, among the labouring class of the community, we may, unfortunately, add an impoverished diet, and an habitual disregard of cleanliness, by which the exhalents of the skin are interrupted in the free performance of their appropriate functions, and the subcutaneous glands subjected to congestion or morbid sympathies, by the partial retention of the noxious excreta. So, in northern latitudes, the intensity of cold, without judicious covering, will induce constriction of the capillary vessels of the skin, impede the exit of perspirable matter, and thus destroy the equilibrium of the circulating fluids, so necessary in the economy of health." (P. 6.)

Dr. M. has had many unequivocal examples, which show that pulmonary consumption, derived from hereditary taint, can be communicated to persons who are not predisposed to the disease. He believes, however, that this occurrence never obtains unless by *direct exposure to the patient's expirations when open ulcers actually exist* in one or both lobes of the lungs, manifested by the expectoration of *pus*.

"The seeds of the disease are thus sown in the pulmonary organs; tubercles are thence generated in the parenchyma or cellular substance of the lungs by absorption: those tubercles I consider to be diseased and indurated glands attached to the lymphatic system; and, like scrofulous tumors in other parts of the body, or on the external surface, depending on enlargement of lymphatic glands, have a constant, though languid, tendency to progress to suppuration. Those tubercles also I consider as extraneous bodies; and, like other extraneous bodies differently situated, induce the suppurative inflammatory action, and communicate that excitement to the surrounding parts." (P. 10.)

The Spaniards and Italians have long been impressed with the belief that consumption is a contagious disease; and, in consequence of that opinion, they are in the habit of consuming by fire every garment which has come in contact with their departed friends. A similar opinion is also very prevalent in Scotland, and is said to be confirmed by continued observation.

For the purpose of illustrating and setting at rest that long-contested and most important question, "can consumption be communicated," the author cites a few prominent cases, selected from many others of a similar tendency, which have fallen under his own immediate observation.*

* There are but few modern pathologists of any celebrity who deny that phthisis is in a certain degree contagious. MASON GOOD observes, that ARISTOTLE appeals to its contagious power as a matter of general belief among the Greeks in his day.—REV.

Dr. FELIX, of Bristol, who for several years had the medical superintendence of the dépôt of prisoners at Stapleton, found that, after consumption had once made its appearance among the prisoners, there was a considerable and progressive annual increase of that class of patients; and that most of the nurses, under the age of forty, became the victims of the same disease. LAENNEC remarks, that in France at least pulmonary consumption does not appear to be contagious: he says, "We frequently observe among the poorer classes a numerous family sleeping in the same apartment with a consumptive patient, and a husband occupying to the last the same bed with his wife, without any communication of the disease. It is certain, however, that a disease not usually contagious may become so under certain circumstances; and we have ourselves no doubt that phthisis is occasionally communicated from one person to another by sleeping in the same bed. Dr. Myddelton remarks,

"As contagion is supposed to depend upon the morbid influence of a debilitating agent acting upon some part of the system, so I apprehend we may in this case fairly infer, by analogy, that by inhaling, from time to time, the vapour issuing from lungs in a state of actual ulceration, and discharging purulent matter, such morbid influence may be conveyed to and absorbed by lungs in the full possession of their functions, and thus propagate the disease by producing atony in the pulmonary nerves. It is upon this principle I am of opinion that we ought to account for what I consider a new fact, namely, that pulmonary consumption cannot be communicated unless open ulcers actually exist in one or both lobes of the lungs, manifested by the expectoration of pus. Upon this theory I have acted for several years, by resorting to the direct application of a tonic to the exposed organs in the incipient stage of local affection, and before any impression could have been made upon the general system. Peruvian bark and sulphate of iron are my usual resources upon those occasions where it has been too late to adopt the first precaution; and it is a consideration worth bearing in mind, that none of those persons who have embraced those preventive means have yet been visited by chronic pulmonary disease, although the usual exciting cause had often been applied." (P. 18.)

The author further adds, that in several instances the disease has been communicated to the attendants, who had disregarded his instructions.

Our readers are doubtless aware that WILSON PHILIP has given the name of "dyspeptic phthisis" to one species of consumption. The author of the volume before us also in many of his doctrines than he himself appears to ima-

believes that we must sometimes refer the *primary* cause of pulmonary derangements to the *digestive* organs.

"In the early stage of indigestion we find little difficulty in restoring the tone of the digestive functions; but negligence, irregularity, or inattention on the part of the patient, too often protracts the disease until the second stage supervenes; the liver then sympathises with the stomach and its vitiated secretion; the bile also now undergoes a morbid change, ushering in a new train of symptoms: at this period, and not before, the lungs participate, by sympathy, in the organic affection, and thus create what may be truly termed dyspeptic phthisis. The obvious indication in such cases is to restore the lost tone of the digestive organs and hepatic gland: thus, by improving the condition of their secretions, the pulmonary symptoms will subside sympathetically, without resorting to other means, unless the disease be of long duration: in that case the lungs will become ulcerated, and require direct application, in conjunction with the plan of treatment which has been suggested. But, in dyspeptic phthisis, I have met with cases in which ulcerated lungs have yielded to direct application, when I have not been able to subdue, by general treatment, the primary disease of the digestive organs, and the consequent hepatic derangement. I have, however, more frequently observed that the lungs cannot be restored to their healthful functions, unless we can previously overcome the primary disease of the digestive organs. As such combinations of disease require very different medical treatment from that which is applicable to pulmonary consumption in its individual form, so it is of vital importance to obtain correct information in the first stage, or at the first consultation, before the patient's strength be exhausted by a combined and undefined disease." (P. 24.)

In the medical management of consumption, it is of course essential to ascertain the actual state of the pulmonary organs. Dr. M. appears to place more confidence in the following tests of the particular state of the lungs than, in our opinion, they deserve.

"We must subject the sputa, in the first instance, to the test of experiment, by dissolving it in sulphuric acid, then add about an equal quantity of water, and leave it in a quiescent state for a few hours: in the event of the lungs or the bronchial tubes being ulcerated, a precipitation of pus will take place; but, should the solution exhibit no sign of precipitation, we may confidently conclude there is no ulceration. Nor is this the only test to which we can resort. Pus may likewise be distinguished from mucus by the aid of a microscope, as the former is globular, and the latter flaky. Muriate of mercury also will afford us that information; for it will coagulate mucus, but it will not coagulate pus. The chemical test is, however, greatly to be preferred; inasmuch as the quantity of the pus precipitated within a given period can be more accurately

ascertained, which will enable us to determine, with some degree of certainty, the extent of ulceration, and by which, combined with a due regard to the state of the animal functions and hepatic system, we can form a more correct prognosis.

"The experiment on the sputa should be repeated from time to time, and the precipitate weighed with care, or the quantity ascertained by a graduated measure. Its gradual diminution will be a fair criterion that the granulating process is progressing; and, when the deposition has disappeared, we may with good reason infer that the cicatrization is completed." (P. 27.)

The stethoscope is not even mentioned!

The author has "uniformly observed that the return of animal vigor is simultaneous with the decrease of purulent expectoration." We are quite sure we shall be supported by every attentive observer of this formidable disease, in objecting to so broad a statement of this opinion. A sudden decrease of the purulent expectoration not unfrequently occurs in the last stage of the disease, when the "animal vigor" of the patient is nearly exhausted. It is very true that, in some cases of presumed pulmonary consumption, the patient gains strength in proportion to the diminution of the expectoration.

Where tubercles are suspected to exist, and there are symptoms of moderate excitement, Dr. M. prefers putting the system under the actual influence of digitalis, as a more safe mean of restraining the excess of arterial action than by the abstraction of blood; unless, indeed, in plethoric habits; and even in those cases he would recommend great caution, otherwise the patient may be prematurely exhausted.

"In digitalis we have an agent possessing peculiar and adverse powers most applicable to our purpose; for, while it restrains the force of arterial action, and lessens the increased impetus of the blood through the pulmonary vessels, it gives additional energy to the absorbent system generally. I am quite aware that digitalis is going out of fashion in pulmonary diseases, and I am as fully aware of the cause. It has been given too indiscriminately, which has produced disappointment, and its enthusiastic advocates have expected it to perform impossibilities: a too sanguine friend is a dangerous enemy. But I do maintain, from my own vigilant observation, that digitalis is a safe and valuable auxiliary when judiciously administered;* and, among other advantages which we derive from its exhibition, is one of importance: by controlling the

* "When the system is placed under the actual influence of digitalis (through the medium of the stomach), it will induce vertigo and occasional nausea; but those inconveniences are avoided by subjecting that useful agent to the absorbent action of the pulmonary vessels."

pulse, we are enabled to give, with impunity, additional nourishment, which would be otherwise impracticable. Yet I do not mean to deny that cases might occur where a high degree of inflammatory action, arising from the accession of new symptoms by taking severe cold, which might sanction depletion; but such urgent symptoms are of very rare occurrence in habits so extenuated: so rare as not yet to have fallen under my observation, in the course of my attendance upon several hundred patients, who had been visited by acute symptoms, in combination with the chronic affection. Topical bleeding, by leeches or cupping, is greatly to be preferred to general bleeding, inasmuch as it does not exhaust the patient's strength to that degree; and then we bring our remedy so much the nearer to the seat of morbid action, a consideration which ought never to be lost sight of; or apply a counter-irritant by blister; or, what would be still more effective, from the greater depth of impression, frictions with tartarized antimonial ointment." (P. 31.)

The author objects to free bleeding in hemorrhage from the lungs or bronchial vessels; and no doubt the practice is too indiscriminately pursued. The cause of the hemorrhage is either the rupture of a vessel in the lungs, or (according to Laennec) exudation from the vessels of the bronchial tubes.

"If from the former, the quantity of blood discharged furnishes us with pretty correct data as to its magnitude. To meet that contingency with the promptness it often requires, I apply a styptic instantan to the mouth of the ruptured vessel, or exuding surface, as the case may be, by inhalation, and that with as much ease as well as certainty, and nearly with equal facility, as I could to a divided vessel upon the external surface; and that styptic would be, in small discharges, calcined alum and gum acaciæ; and, in more extensive hemorrhages, I employ acetate of lead in combination with cinchona, which has never disappointed me even in a solitary instance, and that too after the preceding and other remedies had proved unavailing. In my subsequent treatment I use topical tonics, or direct my attention to the healing of the coats of the ruptured vessel by the first intention, and by direct application." (P. 34.)

In order to illustrate the superior advantages to be derived from *direct* application to the lungs, the author reports and contrasts two cases which he has seen. In both, the patients

"had ruptured a vessel, the hemorrhage had ceased for several months, and both expectorated pus. The only difference in the two cases was, that my patient's hemorrhage commenced at Charleston, South Carolina, about three years before I was consulted, and had returned several times during that interval: the

discharge of pus was considerable, and his strength so prostrated as to be scarcely able to quit his bed for an hour in the course of the day. The other case was under the superintendence of a professional friend, and commenced about fourteen months previously to my seeing him: he also was much emaciated. By mutual agreement, we visited each other's patients occasionally, which their situation enabled us to do without difficulty. My friend's patient was under general treatment: my patient was inhaling cinchona, myrrh, zinc, and frankincense, by which he was restored to perfect health, and the inhaler returned at the expiration of the seventh week. My friend's patient died within a month after my first visit. It is due to my friend to add, that he became a convert to direct application to the lungs by inhalation. A few weeks after my patient had ceased to require medical aid, his friend withdrew his support; and, in consequence, he became an inmate of the almshouse at Philadelphia, where I once called to see him. He informed me that he had availed himself of an opportunity to communicate his case to the physicians of the institution, (being a well-educated and intelligent man,) and on the following day they examined him with the stethoscope, and pronounced the pulmonary organs free from disease. Some months afterward he had an attack of dysentery, which had been for several weeks the prevailing disease of the house, from which he had apparently recovered, but a relapse proved fatal to him. By a post-mortem examination, (I have been informed, but I was not present at the dissection,) it was ascertained that the left lobe had been very extensively ulcerated, was much diminished in size, and the cicatrix fully and firmly formed. This case affords the most unequivocal illustration of the superior advantages of that treatment which brings the remedy into immediate contact with the diseased organ, as no medicine of any kind was conveyed into the stomach from the commencement to the termination of my attendance." (P. 26.)

A few brief observations are now offered upon the fifth and last distinction of "consumption arising from casual causes."

As, from time immemorial, it has been the uniform practice of the intelligent physician, in all diseases and in every country, to bring his remedies as nearly as he can to the seat of morbid action, Dr. Myddelton had long considered it very extraordinary and unexplained why the lungs alone, with such facilities of communication, should be exempted from the operation of so judicious a principle. The factitious gases of Beddoes and Thornton he considers inadequate to the accomplishment of their views.

The case of Mr. B. is related, who laboured under pulmonary consumption. The expectoration had been profuse. A composition of cinchona, myrrh, and zinc was

conveyed *direct to the lungs* by means of an inhaler. Some improvement in the state of the patient was soon evident, and he returned the inhaler on the twenty-third day from the first visit of the author, being restored to perfect health. The only medicine conveyed into the stomach was two doses of castor oil. Two other similar cases are related.

Some observations follow upon the absorbent power of the lungs, for which we must refer to the work itself.

Dr. M. does not mean to declare that all cases of pulmonary disease, in the *advanced stage*, are to be cured by the means he recommends; but he declares that in the incipient or tuberculous stage of phthisis, or before a state of actual exhaustion has taken place in the ulcerative stage, he has lost only two patients since he has adopted the *direct* application of remedies to the diseased organs. He remarks that, in all chronic diseases, more especially in those of the lungs, from their constitutional character and insidious advance, patience is indispensable on the part of the patient, and perseverance on that of the physician, to assure a favorable result. In corroboration of the sanative effect of direct communication with diseased lungs, the following case is related:

"An intelligent farmer of Lancaster county, Pennsylvania, recommended a man in his neighbourhood, labouring under pulmonary consumption in its advanced stage, to follow the horse in a tanner's bark mill. He did so, and was cured, doubtless by inhaling the fine particles of bark floating in the atmosphere of the house which enclosed the mill. The same farmer, he also assured me, protects himself from the prevailing intermittent and remittent fevers of that section of country, by inhaling the powder of yellow bark. To what, I would ask, can we attribute those happy results? The obvious reply would be, to pulmonary absorption by direct application to those organs." (P. 68.)

The author assures us that several of the most eminent physicians in the United States have, from the mass of evidence which he has adduced, become converts to his system. We believe there is much truth in the following remarks:

"I have long been impressed with the belief that the uniformity of treatment which too often obtains in chronic disease of the lungs is, at least, injudicious. Depletion and low diet are, very properly, recommended in the incipient or inflammatory stage; but the great error in the usual practice is its continuance during the advanced or chronic stage, under the impression, I presume, of counteracting the suppurative process of other tubercles, without once attending to those coexistent ulcers which discharge pus, and sometimes calcareous concretions. This practice, surely, cannot

be justified upon any rational principle. In other chronic diseases, where there is little or no excitement, we endeavour to support our patient's strength, to enable him to contend with his adversary. Ought we not, then, to adopt similar precautions in a disease which commits such regular and progressive ravages upon the animal functions of its feeble victims? From long-continued observation, I can state with confidence that consumptive patients oftener die of exhaustion than of the organic disease, and that premature exhaustion is doubtless the effect of depletion and low diet: for you all must have observed the early appearance of emaciation and loss of muscular vigor; the first from the removal of fat by the valvular lymphatic absorbents, and the latter by absorption from the muscles." (P. 77.)

The accuracy of one part of this statement is, we think, very questionable. We cannot conceive that "consumptive patients *oftener* die of exhaustion than of the organic disease," although we believe it to be occasionally the case.

Dr. M. observes, that when an *old* hepatic affection is combined with chronic pulmonary disease, in its *advanced stage*, our prognosis should be unfavorable; and he has too often seen that even the most cautious doses of mercury, administered with the view of relieving the chronic disease of the liver, has aggravated the pulmonary symptoms. In such instances he has consequently for some time discontinued the use of mercury in any form, and in those old combined cases he has since given nitric acid, and extract of dandelion and chamomile, with evident advantage.

"The lungs, in the constitutional disease, as I have already stated, may be tuberculated only, or combined with ulceration, either extensively or in a limited degree; and it is of the utmost importance to designate those stages with accuracy to assure the patient's recovery. Should the lungs be tuberculated only, the inhaler should be charged with calcined sponge, the leaves of conii and vervain, sarsaparilla, the bark of the root of mezereon, and gum ammoniac, reduced to impalpable powder, which I have uniformly observed to discuss tubercles which had not progressed to the suppurative stage. I have in some cases found that this composition excited a degree of irritation by increase of cough. Upon those rare occasions I have omitted the sarsaparilla and mezereon, and then added the powdered leaves of stramonium. In cases where the cough has assumed a spasmodic character, I have combined powdered opium with decided advantage. A diversity of remedial agents are, from time to time, submitted to the absorbent action of the vessels of the stomach and intestines; and the same principle is not only applicable, but necessary, with regard to those of the lungs, from the operation of similar causes, and regulated by practical observation.

"When ulceration of the lungs has actually taken place by the

rupture of some suppurated tubercles, or from hemorrhage, I combine with some of the preceding agents (as circumstances may require) myrrh, frankincense, digitalis, cinchona, metallic oxyds, &c. It is scarcely necessary to observe, that the insoluble and fibrous particles of the remedial agents are discharged from the pulmonary organs by expectoration, and are visible in the sputa. In tuberculous cases, the inhaler should be used three times a day, at equidistant periods, and four inspirations are the proper dose, if properly conducted: but, in cases of ulceration, the most favorable time for inhaling is immediately after a copious purulent expectoration, without any regard to regular periods, in order that the subtile powder may come into direct contact with the bare excavations." (P. 82.)

To repeated depletion in the advanced stages of pulmonary consumption, Dr. M., in common with most other physicians, is decidedly opposed. Local bleeding or external irritants may sometimes be necessary.

The chief, and indeed only, object of this "preliminary dissertation" is to point out the advantage of inhaling various medical agents, in the form of impalpable powder, in pulmonary consumption. Dr. Myddelton has certainly stated enough, even in this brief lecture, to attract the serious attention of the profession to the subject; but he must allow us to add, that, if he does not quickly redeem his promise of publishing a full and perfect statement of his doctrines and his practice, he may not escape the suspicion of improper concealment. This "*avant courier* to the more elaborate offering on the altar of Humanity" has been published nearly four years.

COLLECTANEA.

Floriferis ut apes in saltibus omnia libant,
Omnia nos, itidem, depascimur aurea dicta.

PHYSIOLOGY.

Experiments relating to the Reproduction of the Crystalline Lens. By MM. COCTEAU and LEROY D'ETOILLE. (*Magendie's Journal de Physiologie.*)

THE means which nature employs is not often used to assist the loss which the eye receives by the extraction of the crystalline lens. Authors, for the most part, are silent on this subject; and those who have fixed their attention to it positively deny the reproduction of the lens. Thus HALLER, in his "*Elementa Physiologiae*," says that the lens, being a solid, cannot, like the humors, regenerate itself: "*Lens cristallina fabricam sibi propriam solidam habeat neque humoribus debet accenseri, neque amissa renascitur.*"

The dissection of an eye deprived of its lens, says M. TARTRA, presents

remarkable appearances: at first the depression of the vitreous body, which corresponds to the posterior segment of the lens, is not replaced by any new body; the vitreous humor fills the space which it occupies; the capsule of the lens does not exist, it is removed by absorption. (*Thèse présentée au Concours de 1811.*) Already TENON has announced this fact: "*Cristallini fossula ab humore vitreo in ejus locum secedente repletur.*" Wishing to know if the observations or the assertions of the authors cited are correct, we have practised experiments on different animals, and have obtained results quite different to those which they have announced. We will not examine if this difference is because the researches have been made on eyes operated on in a perfect state, whilst in the other they have been made on eyes operated on account of cataract; we will relate only the results of our experiments; their accuracy may easily be verified by similar experiments.

MM. COCTEAU and LEROY D'ETOILLE performed six experiments, by extracting the lens; and in all the cases they found, in one or the other eye, traces of formation of a new lens. We give their last experiment as an example.

"On the 6th of June, 1825, we performed the operation of cataract on the eyes of two rabbits. After the lapse of a month, both could see very well; but through some accident one was killed, without our having an opportunity of examining the eyes. The other was kept till the 18th of November, (i. e. more than six months,) when the examination of the eye was made in the presence of M. FODERA. The crystalline capsules were perfectly transparent, no cicatrix whatever could be observed; they contained lenses of a moderate size, and of as firm a consistence as those that we extracted. In order to acquire more certainty as to their nature, we plunged them into boiling water, and saw them immediately become opaque, hard, and friable, like the primitive lenses; merely the arrangement into bright lamellæ was only evident in the eccentric lamellæ.

From the experiments which we have just mentioned, it evidently results that the lens may be reproduced. But this fact, not known, or forgotten up to this day, gives rise to other questions. That the lens is reproduced, is it necessary that the eye should be in a perfect state to the moment of extraction? The lens being removed on account of cataract, is it replaced by another? The persons who, after the operation for cataract, could see without the aid of convex glasses, do they owe this faculty to the formation of a new lens? Will the lens continue to be classed among the living solids, or can this property of reproduction be likened to the other humors of the eye?—We will content ourselves at present with proposing the questions, and will defer answering them till we have gathered sufficient facts to enable us to form an opinion.

PATHOLOGY.

Case of a Man who fancied that he had a Serpent in his Belly, and upon whom the Operation of Gastrotomy was pretended to be performed with success. (Condensed from La Clinique.)

The patient was a young countryman, a labourer in the fields, who fancied that he had swallowed a small serpent in a glass of muddy water. This alarming accident had occurred five years before he presented himself to M. MAURY, at the hospital of St. Louis. The animal had grown to an enormous

size, in the imagination of the unfortunate patient, and there was scarcely any part of the body upon which its visits were not occasionally inflicted: its most common residence, however, was the abdomen. Labouring under such an hallucination, the mental distress of the patient may be imagined. He was firmly convinced that nothing but an operation could relieve him from his tormentor; and, as it was evidently useless to reason with him upon the subject, the following *ruse de chirurgien* was practised.

To render the illusion complete, a large fold of the abdominal integuments was drawn up, and a bistoury was passed through. A living adder was secretly introduced into the wound, like a seton. The patient was then allowed to grasp the bleeding head of the animal, and to assist the surgeon in removing it from his body; which was, of course, happily effected. He felt the greatest joy at his deliverance, and was fully sensible the next day of the wonderful diminution of the size of his belly. The dreadful sensations he had experienced for five long years, and the hissing of his tormentor, no longer troubled him. He was completely well in a few days, and has since had no complaint.

One circumstance nearly renewed all his anxiety. He feared that some eggs of the serpent might be left behind; but this apprehension was removed by the adroit assurance of the surgeon that his late visitor was a male.

Diseases of the Heart caused by Onanism.—Dr. KRYMER, of Aach, has lately published an interesting paper on this subject. Our own experience has furnished us with several opportunities of seeing cases of the kind he describes; and, as the subject has not hitherto been particularly discussed, we shall give the leading points of his communication.

Dr. K. is of opinion that diseases of the heart, which have increased so much within the last twenty years, do not always depend upon organic alteration, but are very frequently produced by the baneful and lamentably frequent practice of the vice of onanism. Headachs, great anxiety, palpitations, faintness, an oppression and unusual sensibility in the epigastric region, are the first symptoms produced. They increase in severity in proportion as the subject gives way to the gratification of his unnatural propensity, and quickly diminish, or cease altogether, if he abandons it. To support his opinions, M. K. states many cases. He enumerates the following symptoms as pathognomonic of such affections of the heart; by an attention to which, the practitioner will be enabled to distinguish the train of symptoms from other diseases which are not unfrequently suspected.

1. The hair loses its natural brilliancy, is remarkably dry, and frequently splits at the extremities. It falls off easily and in large quantities, especially from the fore part of the head. In persons affected with consumption, or organic disease of the heart, the hairs appear well nourished, and rarely fall off.

2. The eyes are dull, downcast, frequently full of tears, and without expression, and deeply sunken in their orbits. The edges of the eyelids are reddish, and surrounded by a bluish tint. In phthisical patients, and those with organic disease of the heart, the eyes are brilliant, and always preserve their natural expression and vivacity. In young females, at the approach of menstruation, a blue circle is commonly observed around the eyes, but here also their brilliancy is undiminished.

3. The patient appears very timid, and unwilling to look other people in the face.

4. Periodical headach is common, extending from the occiput towards the forehead.

5. The power of sight is diminished; the appetite is lost, the tongue is usually loaded. A slight cough, short and difficult respiration, are generally present; but still the patient can draw a deep inspiration.

6. Pains in the stomach, with weight and pressure in the epigastric region. Patients with organic diseases of the heart have occasionally these symptoms, but in such cases they are not accompanied by those above enumerated.

7. A general feeling of lassitude and feebleness of the limbs, with pains in the lower part of the back. We would add, also, that pain and throbbing of the testicles, with uneasy sensations shooting up the spermatic cord, are frequently complained of.

8. The perspiration has a dull and sweetish odour, similar to that of infants at the breast.

9. If the vice of onanism be touched upon in conversation, the agitation and embarrassment of the patient invariably betray him.

10. If the practice be continued, the mind is at length enfeebled, the patient is incapable of mental or bodily exertion, and sinks into a state of somnolency.—*Hufeland's Journal*.

Abscess in the Cavity of the Meninges, cured by the Application of the Trephine. By M. ROUX.—A boy, aged fifteen, had, for more than four years, a small fistulous opening in the left parietal region, in consequence of the opening of an abscess of the scalp caused by a blow. M. Roux, having been consulted, thought that there existed caries of the internal table, and that coma, which occurred when the pus did not flow freely, was owing to the accumulation of pus from this caries. He applied the crown of a trephine upon the fistula, with the intention of facilitating the passage of the portions of caries, or necrosed bone: he then found that caries did not exist; the fistula penetrated the dura mater. This membrane was incised, and he found that there existed an abscess in the cavity of the meninges, which compressed the brain. When the pus was evacuated, he perceived a considerable depression on the middle of the left lobe; but this depression gradually diminished, and finally disappeared. The wound made by the trephine gradually healed, and the patient was cured.—*Journal général de Médecine*.

Absence of the Menses in a Woman in whom the other Signs of Puberty existed; Obstruction of the Extremities of the Fallopian Tubes, with Enlargement of the Uterus, which contained a membranous Bag full of Pus. By A. REYNAUD.

A native of Flanders, who, though twenty-one years old, had never menstruated, was admitted a patient of the Hôpital la Charité, with disease of the spine, excepting which and small-pox she had never been ill. At thirteen she had the appearance of a woman, after which, though tall and well made, she grew but little. She never had the precursory signs of incipient menstruation, nor was she subsequently, at any period of the month, similarly affected. At the age of eighteen, she complained of a dull fixed pain in the lumbar region; yet the influence of habit enabled her still to

follow her laborious occupations; but, the pain gradually increasing, she was soon almost, and ultimately quite, a cripple. Two months before her admission into the hospital, an abscess formed at the anterior and superior spinous process of the left ilium. When it was first examined at the hospital, the skin was of a natural colour; the tumor, of the size of a large walnut, fluctuated and disappeared by pressure. As yet there were no signs of fever. The usual treatment of psoas abscess was instituted; but the disease became daily worse, and the patient at length died, worn out by constant suppuration and pain.

After death, one of the vertebrae was found to be nearly destroyed; the femur, ilium, &c. were also much diseased.

The uterus was large enough to be mistaken for that of a woman about six weeks pregnant; exhibited very evident fluctuation, but no fluid escaped through the neck, although this part, more than commonly capacious, was pervious, but partly filled by a whitish, glairy, cohesive substance. An incision being cautiously made through the parietes of the womb, its cavity was discovered to be enlarged and completely occupied by a false membrane, which closed up the orifice of the neck and those of the fallopian tubes. This sac adhered rather intimately to the walls of the uterus, from which it was easily separated, though not united to them by cellular membrane. This sort of cyst contained about three or four ounces of a yellow, grayish pus. Its internal surface resembled a mucous membrane without villi. A black substance, like the uvea, was deposited irregularly between this adventitious membrane and the uterus, whence it derived its mottled appearance. It was corroded internally in several parts, but not quite through; yet two of these ulcerations were extensive, deep, and bounded by the substance of the uterus, itself become soft and irregular. These ulcerations were situated posteriorly, and therefore at a distance from the spot where the neck of the uterus and fallopian tubes usually open.

No trace whatever of the uterine orifice of the fallopian tubes could be found. An incision was made along the course of these tubes, and a hog's bristle was attempted to be thence passed into the uterus, but this was found to be impracticable, since they became impervious as they approached the cavity of that organ, whence they were intercepted by a thin layer of uterine substance, and their diameter was in general much contracted. The caliber of the fallopian tubes was obliterated towards the ovaries. These bodies were more than an inch long, and several small cicatrices were observable upon their surface. Both contained in their centre a corpus luteum, of a brown red colour; and several small fibrous bags in a wrinkled and collapsed state, but admitting of considerable dilatation. Many small oval bodies, as large as hempseed, hollow and of a fibrous texture, somewhat resembling small eggs, were found in the course of the fallopian tubes, and within the folds of the broad ligaments of the uterus.—*Journal Hebdomadaire.*

Obliteration of the left Iliac Vein; Venous Circulation continued collaterally, &c. By M. REYNAUD.

In the veins, as well as in the arteries, the course of the blood is not necessarily interrupted by the obstruction of a large venous trunk, since it may be kept up by collateral anastomosis, as well as by other means. This is accomplished exactly in the same manner as in the arterial system: at first a

great many minute veins augment in size, and assist in conveying the blood from the parts below to those above the obstruction; beyond which some of the veins gradually assume their proper volume, while a few of them retain their newly acquired caliber. Although this state of the venous circulation has not been frequently, it has been correctly described; yet such is the importance of the fact in a practical as well as physiological point of view, and especially in the diagnosis of some cases of dropsy, that the following details of a case, which was recently treated at the Hôpital la Charité, appears to be worthy of record.

A woman, aged sixty-one, who had been for some time under the care of the physician, came under that of MM. BOYER and ROUX, on 22d July, for disease of the right haunch. Five months before she began to feel pain in that part; some weeks after it extended to the knee, and rendered walking difficult. She affirmed that she had never fallen upon her haunch, or in any way bruised it. At this period the right haunch was swollen, and the skin replete with varicose veins. This thigh was about two inches shorter than the other; the great trochanter was observed to be nearer the spine of the ilium than is usual.

The nature of the disease was immediately recognized, and its fatal termination anticipated. The attention of the surgeon was particularly attracted by a very large vein, which, from one of the crural veins, extended across the abdomen, making many irregular turns till it reached the umbilicus, and then it returned back to join the opposite crural vein. At its origin it was single, and afterwards divided into two or three branches, which, soon uniting again, terminated in a single trunk. When the patient was in the erect position, this vein was as large as the little finger. It appears that the patient did not notice the unusual size of this vein till after she had been affected with pain in the haunch and difficulty of walking.

MM. Boyer and Roux, being persuaded that this was a case in which, owing to obliteration of a large vessel, the circulation was kept up collaterally, and that nearly all the blood of the left was conveyed into the right crural vein, they endeavoured to ascertain the precise direction in which the blood flowed, and found that it circulated from left to right. Though there was little doubt as to the obliteration, more or less complete, of the left iliac vein, yet its precise date was not known. Though the patient affirmed that it had but recently existed, yet she related that, between the age of ten and seventeen, her left inferior extremity became œdematous, and the least exercise made her foot swell so much that she was obliged to go slipshod. The swelling subsided by repose. She married at twenty-one, and, on her becoming pregnant, both her legs became œdematous, but the left considerably more so than the right. After her confinement, the swelling of the right leg disappeared, while that of the left continued as before. At this time she was subject to palpitation, to colic, and a slight cough; and from time to time the submaxillary glands were enlarged, though her health was not in other respects bad. At a later period she took a voyage to Martinique, where she resided several years.

During her abode in the hospital, and long before, she was extremely thin, the pain in the haunch unremitting, and latterly she was reduced to a mere skeleton. The feet were both œdematous, but the left more so than the right. The appetite failed; diarrhœa supervened; the gums and tongue were

covered with aphthae; deglutition became difficult; she had frequent nausea and pain in the epigastrium. At this time her debility was extreme, pulse small and fluttering, and she died on the 4th of August.

Inspection of the body.—The iliac vein is entirely obliterated from just above the hypogastric to where the superficial vein of the abdomen joins the crural, about the space of four inches. Throughout its whole course it is surrounded with a cancerous production, from which it is difficult to distinguish it at first sight; but, by attentive dissection, it is found to traverse this mass, and, after appearing a mere cord, solid and compact, again becomes pervious towards the crural arch. The hypogastric vein and its branches were in the same manner obliterated. At the part where the vena saphena empties itself into the crural, a large venous trunk arises from the latter, which is discovered, both by its course and origin, to be the superficial vein of the abdomen. At first taking an oblique direction upwards and inwards, it rises as high as the umbilicus, subdivides into three large branches, which, assuming the form of an arch, descend towards the crural of the other side, after again becoming a single trunk. Near its origin likewise arises another branch, less voluminous, which, after transversely crossing the hypogastric region, terminates in the right crural vein, at a part corresponding to its commencement in the left. Thus it became sufficiently manifest that the blood, returning from the left inferior limb, had ceased to pass by the iliac vein of that side, but, on the contrary, circulated through the right iliac by means of the collateral branches. The crural vein, where the superficial one of the abdomen enters it, is unusually large; and the caliber of the corresponding iliac equally augmented. (*Ibid.*)

Case of Inflammation of the Umbilical Vein, with Infantile Erysipelas. By ROBERT LEE, M.D. Physician to the British Lying-in Hospital.

An infant, four days after birth, was attacked with erysipelatous inflammation of both forearms, and severe febrile symptoms. Two days after the first appearance of redness and swelling of the integuments of the arms, a similar affection was perceived in those of the hypogastrium, genital organs, and upper part of the thighs. The child died on the twelfth day subsequent to birth, and was examined on the 18th November, 1838, two days after death.

The cellular tissue of the affected parts was highly vascular, and in the inguinal regions infiltrated with serum. On opening the abdomen, the peritoneum covering the different viscera was found in a healthy condition; but the umbilical vein, from the navel to the liver, was preternaturally indurated and distended. On laying it open, a yellow-coloured purulent fluid escaped, and the whole of its interior surface was found lined with a layer of closely adhering lymph: this coating of lymph extended into the principal branches of the umbilical vein, proceeding to the liver, and along the ductus venosus, as far as the vena cava. The umbilical vein and ductus venosus remained pervious, and there was no morbid appearance in the vena cava above or below its entrance. The coats of the umbilical were much more thickened than they are usually found to be at the same period after birth.

Morbid appearances of the umbilical vein in young children, similar to those which I witnessed in the foregoing case, have not been described by any pathologist in this country, as far as I have been able to ascertain. In

the writings of Gaithshore, Bromfield, and Underwood, we find little, indeed, that is satisfactory, respecting either the nature of infantile erysipelas or the alterations of structure which accompany it. That inflammation and suppuration of the umbilical vein and its branches not unfrequently occasion fatal erysipelas, or death, without any inflammation of the surface, in new-born children, I am disposed to infer, not from the preceding instance alone, but from the observations of several continental writers on the subject, and from the acknowledged pernicious effects of purulent matter when secreted within the veins of the adult.

Professor OSIANDER found the lungs inflamed, and the umbilical vein, from the navel to the liver, filled with a yellow fluid, in a child who died of erysipelas a short period after birth. In the body of a child, seven days old, examined by MÆCKEL, the umbilical vein was found inflamed, and its inner membrane covered with a layer of pus, and perforated with small ulcerations. In another child, attacked soon after birth with vomiting, colic, diarrhoea, jaundice, and fever, he found the peritoneum inflamed, and a puriform effusion in the abdominal cavity. The branches of the vena portæ, and those of the umbilical vein, were swollen, and their coats much thickened.

M. BRESCHET has repeatedly observed this inflammation of the umbilical vein and its branches in the bodies of children who had died a few days subsequent to birth; and he is disposed to consider this phlebitis as the sole cause of death in many of these cases.

PRACTICAL MEDICINE.

The Efficacy of Tannin in Suppressing Uterine Hemorrhage. By Dr. PORTA. (*Annali Universali di Medicina.*)

CASE I.—In the first case in which the tannin was given, the lady had been subject to hemorrhage, more or less, during a year; and the result was great emaciation and debility. Various remedies had been employed without success: a half-drachm of the dried leaves of the black muscadell vine was prescribed, mixed in a small quantity of water. The first dose was taken on an empty stomach, and the same quantity was repeated in about an hour after having taken food. This quantity produced no derangement of the stomach, and its action was so prompt that on the same day the hemorrhage ceased, and did not again return.

The success of this case induced Dr. PORTA to try the remedy in some others.

CASE II.—A lady, aged thirty-four, of a sanguineous temperament, of a robust constitution, who had regularly menstruated, and who was the mother of four children, had been subject to hemorrhage for a month, but which was so slight that she did not deem it necessary to seek medical aid. After having taken a journey, the hemorrhage increased very much, with violent pains in the hypogastric and lumbar regions. The duration and the urgency of the case, the hardness and the fulness of the pulse, determined me (says Dr. P.) to take some blood from the arm; and this bleeding I repeated at the end of two days, which succeeded in procuring an alleviation of the hypogastric pains, and in moderating the hemorrhage. I ordered the lady to take small doses of ipecacuanha and nitre, and to remain quiet. Finding, after several days, that the hemorrhage continued, notwithstanding the re-

moval of the symptoms of irritation, I ordered a half-drachm of the leaves of the black vine every three hours; which was continued until three ounces had been taken, without any perceptible benefit. I was led to consider that the only useful part of the powder was the tannin which it contained, and therefore prepared it from the leaves in the manner recommended by PROUST. Having thus procured tolerably pure tannin, I ordered the patient to take two grains of it made into a pill, with a little syrup, every three hours during the day. It appeared to agree very well with the stomach; and at the end of three days the hemorrhage ceased; and the lady has been since very well.

CASE III.—Quaroni Angiola, aged about forty, was seized, on her recovery from a bilious fever, with severe uterine hemorrhage; and thinking this was only an irregular appearance of the menses, which had not altogether ceased, she did not at first notice it much. As the discharge, however, continued for some weeks, and the patient began to lose her appetite and strength, she applied to Dr. Porta for relief. Recourse was had immediately to the tannin, in doses of two grains every two hours; and in two days the bleeding entirely ceased.

CASE IV.—Muffi Rosa, thirty-two years of age, of a delicate constitution, mother of an infant which she was then nourishing, was seized, in the fourth month of lactation, with copious uterine hemorrhage, which continuing for several days, she became alarmed, and applied to Dr. Porta. At the time he saw her, the hemorrhage had existed for twenty days, with considerable fever and pains in the loins; the abdomen was soft, but the hypogastrium slightly tumid. The tannin was prescribed in pills, as in the preceding cases; eight of which served to stop the hemorrhage entirely, and to remove all the symptoms of debility consequent on it.

CASE V.—Agnzzi Teresa, aged thirty-eight, of a sanguineous, irritable temperament, had had uterine hemorrhage for three weeks, when I was called to her. On pressing on the hypogastrium, I remarked that it produced pain, and that the pain extended towards the loins. She had irregular accessions of fever, and the pulse was frequent; but there was no notable tumor in the hypogastrium. I considered that the tannin might be prescribed with effect, as in the former cases, and ordered three grains to be taken every three hours. About two scruples were taken in the course of about ten days, at which time the hemorrhage had entirely ceased.

Dr. Porta states that these are only a few of the numerous cases in which he has employed the tannin with success; and, during three years, he has only met with two cases in which it failed. From the repeated opportunities he has had of observing its action, Dr. P. has drawn the following corollaries:

1st. That this medicine acts in a particular manner upon the uterus, when that organ is the seat of an irritation which gives rise to active hemorrhage and when this bleeding results from chronic metritis.

2dly. In hemorrhage arising from acute metritis, it is necessary first to combat the inflammation by repeated sanguineous evacuations, and then to have recourse to the tannin.

3dly. It has no beneficial effect in those hemorrhages which are the result of organic alteration of the uterus.

4thly. This remedy ought to be preferred to all others in the treatment of uterine hemorrhage, not only on account of the promptitude with which it

causes the symptoms to disappear, but because the dose necessary for this purpose is so small as not to disagree with the stomach even of debilitated and irritable persons.

Olum Rivini.—M. LANGIER states that the repeated employment of this oil as a purgative, has twice produced on himself a pruriginous eruption, or redness and itching, at the wrists and bendings of the knees, yet the oil was neither rancid nor bitter.—*American Journal of Med. Sciences.*

Abstract of a Paper entitled "Some Observations on the Effect produced by a Shock of Water in certain Morbid States of the System." By CHARLES M. CLARKE, M.D. F.R.S. (Read at the College of Physicians.)

Dr. CLARKE in this paper alludes to the effect of a "sudden and lavish" application of water to the face, or the immersion of the whole body, in cases some of which have been generally ranked under the head of hysteria.

Such affections have generally occurred in females of a "pasty" complexion, fat, pale, and weak; or in such as have evinced the common signs of debility, such as feeble pulse, cold extremities, and purpleness of parts distant from the centre of circulation. The age of the patients has varied from ten to thirty years; in many, menstruation has been imperfect or absent, but without there being reason to regard this as the cause of the disease. The affection has consisted, 1, in actual loss of power of certain muscles, or an unwillingness to exert such power if it existed; 2, in an irregularity in certain muscular actions. These have apparently been brought on by indolence in some cases; in others, by over application of the mind; and, in yet others, by sudden and violent emotions. The muscles chiefly implicated have been those of the throat, neck, and lower extremities; but the author does not include chorea among cases of this nature, however beneficial cold bathing may be in that disease; nor are his remarks extended to any form of tetanus.

Sometimes the disease alluded to by Dr. Clarke appears in the form of spasmodic cough, which comes on "several times in every minute during the whole day" for many weeks, except when the patient is eating or sleeping. Sometimes the voice is suddenly lost; at others, the patient barks like a dog, or makes other "offensive and unintelligible noises." With regard to deglutition, sometimes the patient can swallow large morsels of food, or drink large quantities of fluid, but is unable to make the muscles act upon small quantities, and lets the saliva run from the mouth. In some examples the power of swallowing has been so entirely lost as to render it necessary to introduce food into the stomach through a tube. Sometimes the diaphragm is affected as in hiccup; in others, the breathing is very imperfectly performed, and the oxygenation of the blood interrupted. Lock jaw is uncommon, but an affection of the muscles of the neck, resembling opisthotonus, is not unfrequent.

When the muscles of the lower extremities are affected, the most common condition is a total loss of power, so that the thigh cannot be drawn up towards the body; or, if the limbs be bent by another person, the patient cannot straighten them again. In some cases Dr. Clarke has known this continue for many years, till at length the muscles have shrunk and the limbs lost their natural form. The arms are much less frequently affected, and scarcely ever are both together.

The affection of the lower limbs, above described, bears no resemblance to paraplegia; there being no evidence of pressure on the brain or spinal column, no numbness of the surface, nor tingling of the limbs.

The absence of constitutional symptoms, and the performance of the natural functions, the author observed, had led many to suspect that such cases were feigned; but he does not think this probable, when it is considered that the cases so frequently agree with each other, without any possibility of this being the result of imitation, and that the patients are debarred the enjoyments of life, and their prospects blasted by the notoriety of their disorder. If it be argued that fear is a powerful agent in removing them, it may be answered that this is a very strong incentive to action under other circumstances, and frequently produces exertions which could not otherwise have been made.

There are certain circumstances which contraindicate the use of this remedy: viz. disease of the brain, lungs, or abdominal viscera, but particularly of the heart or great vessels. These, even if suspected, should prevent this treatment from being adopted. With regard to its application, it is generally sufficient to pour from two to four gallons of water (warm or cold, according to circumstances,) over the face, only allowing a short interval for the patient to breathe. The most convenient way is to place the patient with the head hanging over the edge of the bed, while she is firmly held by attendants. The first or second application is generally sufficient; but if, after two or three trials, it fails to give relief, it is not worth while to persevere. In old cases, and those which are severe, the whole body must be immersed in water several times, with "very short intervals" between the plunges. The patient not unfrequently suffers from severe headach afterwards; which, however, may be relieved by placing her in warm blankets, and exhibiting diffusible stimulants, as ammonia.

Four cases were mentioned in illustration. In one, the patient, about twenty-five years of age, was affected with very violent spasms of the diaphragm. A great variety of remedies had been employed without avail. She was cured by the cold affusion twice repeated. In another, a young lady aged twenty-two, there were spasms of the diaphragm, which impeded breathing, and the power of swallowing was lost, so that it was necessary to feed her through a tube. Menstruation was interrupted; the bowels singish; the patient could not stand. After many remedies had been tried, recourse was had to plunging her into cold water. She had severe headach, requiring ammonia. Her breathing was immediately relieved, and the power of deglutition restored in a slight degree. She recovered.

In a third instance, the patient was only nine years of age: she had spasmodic cough incessantly, except when she was eating or sleeping. The cough was instantly cured by cold affusion.

In a fourth patient, a young lady aged fourteen, a violent spasmodic affection of the diaphragm and larynx, which greatly interfered with deglutition, was cured with equal rapidity by similar means.—*Medical Gazette.*

SURGERY.

Removal of a Tumor from the right Nympha, by the Application of a Jugum.
By A. B. GRANVILLE, M.D. &c.

The following description of this very interesting case was lately submitted to the Westminster Medical Society by Dr. Granville. The instrument employed was also exhibited. We saw the patient a short time after the operation: her health was nearly reestablished, and the part operated upon was almost entirely healed.

The removal of pendulous tumors, or parts morbidly enlarged, connected with the structure of the external genitals in females, has long engaged my attention, in consequence of the frequent applications made at the Westminster General Dispensary by patients labouring under complaints of that description; and also from a considerable number of similar cases having occurred in my private practice within the last fourteen years. The methods usually employed for affording effectual relief in the majority of these cases, namely, excision and the application of ligatures, I have at times, in common with other practitioners, found to be attended with disadvantages, which have either deterred the patient or her attendant from resorting to them. I need hardly mention that I allude to the hemorrhage, sometimes formidable, which must necessarily follow in adopting the first method; and to the difficulty which will occasionally be encountered in accomplishing the second process. Indeed, the probability of serious hemorrhage succeeding the removal of all such tumors, or enlarged parts, when of considerable size, has induced, of late, many of the most eminent surgeons to abandon that practice nearly altogether, and to resort to the application of ligatures. If the connexion of the part to be removed with the healthy structure be by means of a round base, however large, one, two, or more ligatures may be applied without inconvenience; but if the connexion of the part to be removed be by means of a flat and lengthened attachment, the ligature, or ligatures, may not be so easily or effectually applied, inasmuch as there must be a puckering, or drawing together, of a considerable flat surface in a healthy structure below the disease, in order effectually to check the course of life in the latter; an operation attended by the most excruciating pain, and the almost inevitable risk of laceration.

These considerations induced me to devise a simple instrument, or *jugum*, by which, in all cases of tumors to be removed, having a flat and lengthened attachment, the effect of a single ligature is produced in an instant. The Society has an opportunity this evening of inspecting, in the preparation which lays before them, the result of the application of this instrument. The case is briefly this:

A young married woman consulted me a short time ago on account of some disease affecting the external organ of propagation. On inspection, I found that the right nympha, from the clitoris to the furea, measuring in length about two inches and three fourths, was morbidly enlarged, and to a considerable size, being partly scirrhous and partly vascular, and exhibiting several points of ulceration on its internal, and numerous points of abrasion on its external surface. The left nympha appeared affected by a similar disease, but in size was about one third only of the right. The local complaint had

Removal of a Tumor from the right Nympha. 461

become a source of great constitutional irritation and disturbance; and there was considerable discharge both from the part itself and the vagina. The sufferings it produced were constant and increasing, and the poor woman begged earnestly to be relieved from her burthen. I ascertained from her that it had been treated as a syphilitic affection, although she was disposed to attribute the disease to a very difficult labour she had had the last time she was pregnant; but it also appeared from her report that none of the remedies employed had arrested the disorder. Under these circumstances I proposed to her the removal of the tumor; and, as soon as the jugum, of the size of the attachment of the tumor, could be got ready, it was applied, and the circulation between the latter and the healthy structure completely interrupted in less than half a minute.

Excision was out of the question in this case, for the vascularity of the part was excessive; and it would not have been a very easy matter to take up all the bleeding vessels. Besides, I could gain nothing in the way of sparing pain to the patient by having recourse to excision; and, as to time, I knew that in four days, or five days at the utmost, the removal of the tumor would be effected by pressure with the jugum. Such was, in fact, the result; and the preparation now on the table of the Society exhibits the tumor which came away at the end of the fifth day after the application of the instrument. Its vascularity shows that it would have been hazardous to have employed excision; while the great length of its attachment demonstrates that at least three ligatures must have been employed, in order to avoid laceration of the healthy skin; and that the application of three ligatures must be a complicated operation, compared to the mere application of an instrument which the patient herself might have easily adapted to the part. Moreover, even the mere insertion of a needle through two parts, at least, of the healthy skin, for the purpose of applying the said ligatures, trifling as it may seem to the practitioner, is not so to the sufferer. Another advantage of the jugum is, that the operator may at pleasure, and in a second, tighten or relax the pressure, according to the symptoms which it may have produced at first; which advantage is not to be despised when it is considered that the sudden tightening of a ligature has produced, at times, formidable symptoms: whenever these have followed the application of a common ligature, there is no other means of relaxing its firm grasp but by cutting the ligature altogether; and hence the necessity of a fresh application of it to the part, after the constitutional symptoms have subsided; but, in the case of the jugum, two or three retrograde turns of the screw are sufficient to relieve the untoward symptoms; after which, pressure is again easily obtained. In the case of the young woman in question, I twice gave way to her solicitations, and unscrewed the instrument so as to relieve her of pain; circumstances which, I have no doubt, protracted the period of separation of the tumor by one day at least. I feel perfectly satisfied, however, that it will be better, in all such cases, to strangle the tumor at once, and drown the pain in laudanum during the first twenty-four hours; and not to unscrew the jugum except where really formidable symptoms seem to arise from the pressure.

In answer to a question from the President, Dr. Granville further stated that, on the coming away of the tumor, the jugum came away also, leaving a healthy surface behind, and without being followed by a single drop of blood.

—*Med. Gazette.*

Case of extensive Suppuration and Death, succeeding the Prick of a Pin; with Remarks. By DAVID CUNNINGHAME.

A woman pricked her finger with a pin. She applied poultices, but continued to get worse till the third day, when she consulted Mr. Cunningham. An incision was made down to the bone: this, after a time, discharged some thin unhealthy pus. The absorbents inflamed; the first phalanx of the finger felt "benumbed;" and the bone was found to be in "a semi-dissolved state." Another incision was made over the second phalanx. The parts sphacelated, the glands in the axilla swelled, and on the seventeenth day fluctuation was perceived over the superior angle of the scapula. Counter openings were made; stimulating injections, tonics, opiates, &c. were used without avail; and she died on the thirty-eighth day from the receipt of the injury, and eighteenth from the opening of the abscess.

Mr. Cunningham is of opinion that irritation is chiefly communicated through the nerves, exciting an unhealthy action in the system partially, or in the system generally; and that the predisposition to this condition may be hereditary, or the result of disease or of mode of life, and that it may exist as well in the apparently robust as in the weak.—*Glasgow Med. Journal.*

A Case of Tumor successfully extirpated from the Face. By J. HUTCHISON, Esq.—Dhean Dhas, fakhir, ætat. thirty-two, thin, sallow, and emaciated, and but nervous and weak in mind, applied to me for assistance about the beginning of February 1826, in consequence of a large tumor, which was attached to about two thirds, or between that and one half of the upper lip, but inclining more to the left side, where it extended up on the side, so high as within an inch of the eyelid. From the insertion of the levator muscles, which appeared to have become stronger from use, he had considerable power in raising the tumor. Over it the hairs of the mustachoes were thinly scattered, and in general the integuments were adherent to the tumor underneath, except high on the left side of the face.

The tumor was irregular on the surface, and seemed composed of distinct nodules or lobes, from the size of a plum to that of a small potato; and to me it appeared to have increased by single additions of this sort, but I was unable to ascertain this point from the patient. There were numerous large tortuous veins over its surface, and several scabs and cicatrices were observable; while on the under part there was an ulceration, quite superficial however, from which exuded a plentiful watery discharge resembling saliva.

At the left angle of the mouth, the boundary of the tumor was abrupt, as if it had formed a cyst by the condensation of cellular membrane; and about half an inch of the lip there appeared quite sound, while on the right side it passed very imperceptibly into the sound parts. On examination, the gum underneath appeared pretty healthy; but three or four of the teeth underneath the tumor were loose.

The patient gave the following account of himself: That it commenced as a small boil or pimple, which afterwards burst, and was painful; that it daily increased for eight years to the present time, when he applied to me; that in cold or rainy weather it was very painful; and that it sometimes discharged such quantities of blood that he fainted, and that his health was greatly impaired by these discharges, which I supposed must have been the result of the sloughing process. He likewise mentioned that the tumor inconvenienced

him much, and prevented his sleeping from its weight, and by obliging him always to recline in the same posture. It could be freely handled without giving much pain. He was very anxious to have it removed, but I was apprehensive that integuments sufficient could not be preserved.

However, on the 15th of February, with the assistance of one of the young officers of the regiment, I removed it, according to his request. It weighed two pounds, apothecaries' weight. On examining the wound, I observed at the upper part that a very small portion of diseased substance remained, which I transfixed with a hook, and removed. I had no watch by me. The patient lost about eight or ten ounces of blood, and about six or seven vessels were secured, although some of them required to be irritated before they would bleed, from the faintness of the patient. Both ends of the ligatures were now removed, as union by the first intention was my great object. The sides of the lip were approximated, and secured by two harelip pins, while one stitch of the interrupted suture secured the middle of the wound on the cheek. The wound was now dressed in the usual way. The wound in the lip healed by the first intention, while that in the cheek granulated from the bottom, and all was healed up in about twenty-five days, although a small fistulous opening from the mouth remained for some days after all the rest had healed. The mouth afterwards appeared rather small and a little to one side, and there was some puckering of the integuments of the cheek.

I detained him till the 28th of April, when the cicatrix continuing good, and his general health having much improved, I discharged him. He suffered a good deal for three or four days after the operation from fever and a cough, occasioned by the discharge running into his mouth. The tumor appears to me to be the common vascular sarcoma of Abernethy.—*Trans. of the Med. and Phys. Society of Calcutta.*

MIDWIFERY.

Six successive Hip Presentations in the same Individual.—Madame Q., large and well made, of good constitution. Her first accouchement was long and difficult: the hips presented, and various manipulations were adopted by her attendant, which caused great pain; but at length the delivery took place spontaneously. She was put to bed a second time, and the labour was much easier, being speedily terminated, although the presentation was the same as before. On the third occasion, as soon as the pains came on, an accoucheur was sent for, who remained with her above ten hours, when the labour gradually ceased, and the delivery did not take place till five weeks after.

The physician who relates the case was sent for to the lady during her fourth pregnancy. He found the os uteri thick and hard, with a little tumor at the left side, about the size of a nut, and which felt like a hemorrhoid. The pains continued, but without effect, and after some hours entirely ceased. In a month afterwards she was delivered without difficulty, the hips still presenting. A fifth accouchement was attended with similar circumstances, false labour supervening about the eighth month, and delivery three weeks after.

On the 11th of December last, Madame Q. was seized with labour pains for the sixth time, but which again subsided till the 8th January; the hips presenting as in every one of the preceding instances.

These presentations are neither rare nor difficult at the *Maternité* in Paris:

'360 were met with in 20,000 cases, and of these only thirty required the interference of art. But the case above detailed is so far remarkable, because though the woman was well formed, and the pregnancy presented nothing extraordinary, yet the position of the fœtus was always the one above mentioned.—*La Clinique*.

CHEMISTRY.

Nitrate of Silver as a Test for Vegetable and Animal Matter.—Dr. DAVY states that nitrate of silver, dissolved in pure water, is not altered by the sun's rays. If the minutest quantity of vegetable or animal matter is present, the solution is discoloured; and with common distilled water, the discoloration is strong. To prove that the cause of the change of colour is the one assigned, it is sufficient to allow the coloured matter to subside, decant the colourless solution, and expose it again to sunshine. However powerful the sun's rays are, no further effect is produced; but, add more common distilled water, and the phenomenon will instantly reappear. He believes nitrate of silver, thus used, is one of the best tests of the presence in water of very minute portions of vegetable matter: of course, any chloride of silver that may be formed in consequence of the presence of any muriates should be allowed to subside in the dark, and the subsidence should be complete before the fluid is decanted and exposed to light.—*Jameson's Journal*.

On the Presence of Iron in Tin.—From M. FISCHER's experiments it would appear, that even the very best tin contains small quantities of iron occasionally, which, entering into the compounds afterwards formed by the metal, cannot be easily separated. The best method to decide upon its presence is to decompose a salt formed from the tin by ammonia, and separate the protoxide which is thrown down. This precipitate is then to be digested in cold muriatic acid; nearly all the oxide dissolves; but, if the portion which last remains be dissolved, it will be found to contain but little oxide of tin, mixed with a large proportion of oxide of iron. This portion, acted upon by warm and strong muriatic acid, will dissolve; and then the iron may be recognised in the usual manner.—KASTNER, *Bull. Univ. A. x.* 313. (*Quarterly Journ. of Science*.)

MISCELLANEOUS.

*Effects of Violence on the Body after Death.**—In the very interesting paper from which we select the following extract, Dr. CHRISTISON relates many experiments in which external violence was inflicted upon the body after death, for the purpose of instituting a comparison between the effects which follow in such cases, and those which result from injury before death.

In respect to external contusions, the experiments show that for some hours after death blows will cause appearances which, in point of colour, do not differ from the effects of blows inflicted recently before death; that the discoloration generally arises, like lividity, from an effusion of the thinnest possible layer of the fluid part of the blood on the outer surface of the true skin, but sometimes also from an effusion of thin blood into a perceptible

* From Dr. CHRISTISON's "Observations on Medical Jurisprudence." *Edinburgh Med. Journal*, April.

stratum of the true skin itself; and that dark fluid blood may be even effused into the subcutaneous cellular tissue in the seat of the discolorations, so as to blacken or redden the membranous partitions of the adipose cells; but that this last effusion is never extensive.

It can hardly be doubted that the appearances now described will exactly imitate slight contusions inflicted during life. But I conceive that the blows in the latter case must be trivial.

When a blow inflicted during life is more severe, it may have the following effects, few or none of which, so far as we know, can originate in violence after death: 1. There may be swelling from the extent of the extravasation. This is certainly never caused in the dead body. 2. When the violence has been applied a few days before death, there will be a yellow margin round the black mark, which is another appearance that cannot be formed except during life. 3. There may be clots of blood in the subjacent cellular tissue, either with or without swelling. This appearance I have never seen accompanying contusions caused in the dead body; but it may be doubted whether clots might not be formed, if the injury was inflicted very soon after death, and had the effect of lacerating a considerable vessel in the neighbourhood of loose cellular tissue. 4. In the instances in which the blood does not coagulate at all after death, contusions caused during life may be recognised by the extent of the effusion into the cellular tissue. In a part not liable to be infiltrated by its depending position, and not in the vicinity of a large vein, a deep effusion of fluid blood, which fills and distends the cells of the cellular tissue, can hardly be produced on the dead body. 5. Perhaps one of the most characteristic signs of a contusion inflicted during life is incorporation of blood with the whole thickness of the true skin, rendering it black instead of white, and increasing its firmness and resistance. This sign may not be always present; for, as every one knows, a blow may cause extensive extravasation below the skin, without affecting the skin itself. But, when present, I am disposed to consider it characteristic, because I have never been able to produce it in the dead body, and it is not easy to conceive how such a change can be wrought in so dense a texture as the skin, without the force and agency of living vessels.

It is impossible to fix absolutely the limit of the interval beyond which contusions cannot be imitated by violence applied to the dead body. It appears to vary with the state of the blood and the time which elapses before the body cools and the joints stiffen. Sometimes the appearance of contusions can hardly be produced two hours after death; sometimes they may be slightly caused three hours and a quarter after it; but I should be inclined to think this period very near the extreme limit. Wherever the warmth of the body and laxity of the muscles were not considerable at the time the injury was inflicted, we may be sure that the appearance of contusions cannot be considerable. It is probably, therefore, only on the trunk that, even in the most favorable state of the body, namely, when the blood remains altogether fluid, any material mark of contusion can be produced so late as two hours after death.

As to *internal hemorrhage*, it is plain that if, in the dead body, a considerable blood-vessel, and more especially a vein, be lacerated so as to open into an extensive cavity or shut sac, there will be more or less effusion of the fluid part of the blood into the cavity. And even if the aperture in the vessel communicate only with the cellular tissue, percolation will take place to a

notable extent, particularly when the level of the part is low in relation to the rest of the body.*

The hemorrhage and percolation will be peculiarly distinct in the cases in which the blood does not coagulate at all after death; for it seems then to acquire even a greater degree of fluidity than it possesses during life. We must not suppose that extravasations of blood within the body are not vital, merely because the effused blood is found fluid. Although vital effusions are usually coagulated, they are not so always; and, in particular, they are often fluid in the spinal canal. Professor BERNDT has mentioned such a case, the effusion having been caused by fracture of the cervical vertebræ;† M. OLLIVIER met with another, in which the effusion was caused by a wound of the middle meningeal vein with a small sword;‡ and Mr. CHEVALIER relates another, in which the hemorrhage was spontaneous.§ In all of them the blood effused into the spine was fluid, and in Berndt's case it was fluid every where. A circumstance worthy of mention here is, that the blood may continue permanently fluid in some parts or organs, while it coagulates as usual throughout the body generally, or perhaps in the heart alone. In the subject of one experiment it was coagulated in the heart, but fluid in the subclavian and spinal veins; in another it was firmly coagulated in the great veins of the abdomen, but quite fluid in the vessels of the spinal canal. The late Dr. MERTZDORFF, of Berlin, in a paper on the Effects of Blows after Death, has taken notice of this diversity in the appearance of the blood, and says it commonly appeared to him that the blood of the vessels within the head and spine, in the subclavian veins, and in the vena portæ, was fluid, even when it was coagulated in the other vessels. I have often had occasion to make the same remark. The inference to be drawn from the fact is, that the inspector must not hastily assume extravasations of fluid blood in these parts as having taken place after death, because he finds the blood coagulated in the heart and subordinate vessels, but must examine the state of the blood in the vessels adjoining the extravasation.

It may not always be easy to distinguish internal hemorrhage according as it occurs before or after death. Neither can I pretend at present to examine the subject in all its bearings. If any of the organs in the cavity bear marks of compression by the effused blood, the effusion must have been vital. So, likewise, if the cavity into which the hemorrhage has taken place be filled with blood, or if any of the softer viscera be comminuted, or broken down, or injected, by the blood bursting through their texture; or if the hemorrhage be considerable in relation to the size of the vessel, or have evidently proceeded from an artery, and be extensive in proportion to its size. If the effused blood be coagulated, and the coagulum not broken down, it must

* Dr. Christison has previously remarked in his paper, that "blood drawn from the jugular and femoral veins, eight hours after death, flowed out quite fluid, and in a few minutes formed a firm coagulum, with separation of serum. The clot was firm enough to bear tossing from hand to hand without breaking. Blood drawn from the femoral vein an hour and a half later, and which was losing its fluidity, formed, on standing, a thick diffuent mass, with separation of serum, but without a proper clot."

† Beiträge zur gerichtl. Arzneik. ii. 231.

‡ De la Moelle épinière, p. 254.

§ London Med. Chirurg. Transactions, iii.

|| Horn's Archiv für Mediz. Erfahrung, 1823, i. 280.

have taken place either before death or very soon after it. A state of the blood, the reverse of that mentioned under each of the foregoing propositions, will render the date of the hemorrhage at all events equivocal. A small, or even moderate, effusion from the rupture of an artery of considerable size could hardly have occurred during life. An effusion of fluid blood from vessels in the neighbourhood of which it is coagulated, must have occurred in the dead body. The most doubtful appearance of all is, when the effusion is fluid, moderate in quantity, unaccompanied by the rupture of any considerable vessel, but connected with fluidity of the blood throughout the body, or in the vessels near the cavity into which the hemorrhage has taken place.

The interval after death within which vital hemorrhage into the internal cavities may be imitated by violence to the dead body, will vary with the qualities of the blood. When the blood has not lost its power of coagulating in the body, the violence must be applied before it coagulates; which appears to happen soon after the stiffening of the muscles begins. When it continues altogether fluid, there seems no limit to the time at which imitative hemorrhage may be produced, except great decay of the body. In Experiment 3, as well as in the body of the woman Campbell, it was produced about eighteen hours after death. At this period all the changes must have occurred which the body undergoes prior to putrefaction; and, when putrefaction has begun, imitative hemorrhage may be caused still more readily, nay, without the cooperation of external violence.

Silver detected in the internal Viscera.—Dr. WEDEMAYER, of Hanover, has recorded the case of a person who had used the nitrate of silver internally for eighteen months, for the cure of epilepsy. The cure was effected, and the skin became discoloured. The patient was attacked with hepatic disease and ascites, of which he died. Upon dissection, all the internal viscera were found more or less stained of a blue colour, in the same manner as the external surface. The plexus choroides and pancreas were submitted to examination by M. BRANDE, and a portion of metallic silver obtained.—*Rust's Report.*

NATURAL HISTORY.

Curious Hybrid.—There is now at Berlin, an animal produced between a stag and a mare. The appearance of the creature is remarkable; the fore-part is that of a horse, the hind part that of a stag, but all the feet are like those of the latter animal. The king has purchased this hybrid, and sent it to the menagerie at Potsdam.

Observations on the Mantis Tribe, or that of the Leaf Insects, by Dr. ADAM. Read at a meeting of the Physical Committee of the Asiatic Society of Calcutta.

Of all the insect tribes in India, that of the Leaf Insects is the most remarkable for external form. According to the latest classification, this tribe has been divided into the families of the Mantida and Phasmida, founded on a difference in the structure of the foot and leg; this member in the former being raptorial, is provided with a sharp claw, and a hollow on the leg and thigh, and a double series of spurs, for the better securing its prey; and in the latter being destitute of any such peculiarity. Dr. Adam calls two of

the specimens laid before the Committee *Gongylodes*, as they appear to correspond closely with the description and figure of that species in the latest entomological works. This insect, when alive and fresh, presents a striking resemblance to a blade of grass, differing in colour according to the season, being green and succulent in the rains, and in the dry weather so much like a withered straw, that they can with difficulty be distinguished. On first beholding this insect, during the hot winds, in the upper provinces, Dr. Adam could hardly be convinced that it was not a straw, and part of the same long and dry grass on which it rested. A slight movement of the head, however, like that of the house-lizard on the wall, when watching its prey, satisfied him that it was a living object, and on removing grass and all to his hut for examination, he was both surprised and amused at the extraordinary powers which the insect developed. Clinging close to the upright straw, which was fixed on the table, the animal lay in wait for its prey with no less design than would be exhibited by a cat, or tiger, and if an unlucky fly happened to alight in his neighbourhood, there was hardly left to it a chance of escape. He projects rapidly his armed paw, and with unerring aim transfixing his victim, lodges it in the toothed hollow of the thigh, destined for its reception. After the fly is in his power, no time is lost in devouring it, commencing with the trunk, and in a few minutes swallowing the whole, the head and wings constituting the finishing morsel. In this manner he would destroy at a meal five or six large flies, which in point of bulk nearly doubled his own body. On viewing the structure of the fore-limb of this insect, it seems impossible to imagine any thing more perfectly contrived for the end in view. The limb itself so strong and muscular, provided with a claw at its extremity, likewise strong, horny, and sharp as a needle; and the groove in the last joints, with the double row of teeth or spurs on the margin, corresponding and locking closely into one another, like the fangs of the alligator, altogether constitute an apparatus for seizing and securing its prey, which in so small a creature cannot but excite admiration. By means of these formidable weapons, the insect not only becomes destructive to others, but is employed to attack its own species; and in China, we are told, fighting the Mantis forms as much the favorite amusement of boys, who carry them about in cages for that purpose, as cock-fighting in England, or among the inhabitants of the Eastern Islands. — *Edinburgh Journal of Science*.

INTELLIGENCE.

MONTHLY REPORT OF PREVALENT DISEASES.

DURING the whole course of our professional experience, we do not remember to have found disease in general so frequent as it has been during the period which has elapsed since our last report. In this remark we are not singular: the same observation has been made by those practitioners with whom we are acquainted, who have the best opportunities of forming correct opinions upon the subject, both from their private and public practice. Fortunately, however, the severity of the prevailing maladies has not kept pace with their frequency. Many cases of catarrhal affection have not proved very obedient to the remedies prescribed, but, although obstinate in their

duration, they have at last subsided without inducing any permanently bad effects. Pneumonic inflammation has been common, and severe in some instances, and also somewhat intractable, but still, upon the whole, we believe the ratio of fatality, in reference to the frequency of disease, has not been great.

Children have continued to suffer, during the last month, from measles, Hooping-cough, and scarlet fever. Although we by no means coincide in the opinion that medical treatment, judiciously directed, is but of little service in hooping cough, we are convinced that Dr. DEWEES rates much too highly the efficacy of our art when he states, "that its duration may as certainly be shortened as the march of fever;" unless, indeed, the disease is characterised by much less determined features on the other side of the Atlantic than it is in this country. Some time ago we frequently administered the prussic acid, which has been so highly extolled, for the relief of this disease. We have now given up its use altogether in hooping-cough, as we have not found any benefit from its employment, and we do not hold ourselves justified in administering so very powerful a remedy, unless the advantages arising from it are decided.

Royal College of Surgeons.—Mr. GUTHRIE commenced his Surgical Lectures on Tuesday last, the 28th April. He will successively treat on the following subjects: Lecture 1st. On the natural and artificial means of suppressing Hemorrhage. 2d. On the nature and theory of Aneurism. 3d. On wounded Arteries, and the inapplication of the theory of aneurism to their treatment. 4th. On Inflammation of the Veins. Four lectures will succeed on Injuries of the Head.

Jacksonian Prize.—The Jacksonian Prize has been awarded by the College of Surgeons to Mr. GEORGE ROGERSON for the best dissertation on Inflammation of the Membranes.

Regulations of the Apothecaries.—Much anxiety has been created amongst many of our junior brethren, by an assertion which has lately been made in the *Lancet*, that certificates of lectures attended during the term of apprenticeship would not be received at Apothecaries' hall. The following letter, with which we have been favored by Mr. WATSON, will of course relieve any such groundless apprehensions:

To the Editors of the London Medical and Physical Journal.

Gentlemen,—I beg leave to request you will afford me a small space in your very useful Journal, for the purpose of contradicting, in the most unqualified manner, a misstatement contained in the *Lancet* of the 18th instant. My attention was directed to this *mis-leading* article by a medical student, who applied to me in my official capacity this morning, to ascertain whether there was any foundation for the great alarm these paragraphs had occasioned him:

The misstatement I allude to is as follows: "The whole scheme of examination at Rhubarb hall is well adapted to the powers of the examiners, seeing that it is made to depend on the inspection of certificates, and the verification of dates; but the grand test of qualification is that whereby it is ascertained that no part of the candidate's extra-official knowledge has been acquired during the five years which must be exclusively devoted to the services of the shop.

No degree of knowledge, no amount of professional acquisitions, will avail the applicant for a licence at Rhubarb hall. On the knowledge or professional acquisition of the candidate, the worshipful examiners do not, for the best of reasons, undertake to deliver any opinion: what they require is, the production of certificates showing that the candidate has attended certain courses of lectures: *but if the date of these certificates happen to fall within the five years required to be consumed in the drudgery of a shop, this is a fatal objection to the candidate's admissibility*, and he is rejected as incompetent to discharge the duties of a medical practitioner. In vain may the candidate urge that he is ready to undergo the most searching examination: it is useless, say the worshipful tradesmen, to urge your pretensions; *we can only examine your certificates, and your certificates are dated at a time when your whole attention should have been devoted to the services of the shop."*

I shall make no observations on the vulgar and disrespectful terms in which the editor of the *Lancet* speaks of the Court of Examiners, in several passages of the article from which these extracts are copied; because I presume not to enter upon the labour of attempting to reform either his language or his manners. The *only* motive I now have for taking any notice of what has appeared in the *Lancet*, arises from my desire to set at ease the minds of the great majority of students who are at the present time attending lectures.

If I were to designate the statements contained in the *Lancet* by the epithets which deservedly belong to them, I should be obliged to make use of terms which are not tolerated among gentlemen; but, as I wish not to depart from that propriety of language which our profession were accustomed to in their communications, before the *Lancet* introduced its peculiar vocabulary, I will only give to them the less offensive name of misrepresentations.

The Court of Examiners, I assert, have never, from the very first day on which the Court was formed to the present hour, refused to admit any candidate to an examination because he had attended any part, or the whole, of the required lectures during the period of his five years' apprenticeship: nor have they ever had, at any time, any intention of making a regulation to that effect. The Court of Examiners are fully sensible of the great benefit which medical students derive from attendance on lectures during their apprenticeship; and they have on this account given their countenance and support to the medical schools which have within a short period been established in Manchester, Liverpool, Birmingham, Bath, Bristol, Leeds, and Sheffield.

The records of the Court contain ample testimony that more than two thirds of the persons examined did attend available courses of lectures during their apprenticeship; and the book in which the names of the rejected persons, and the reasons for their rejection, are registered, proves that no candidate has been refused a certificate on any other ground than a deficiency of knowledge and of professional acquirements, on which the editor of the *Lancet* says the "examiners do not undertake to deliver any opinion."

Allow me, gentlemen, to request you will be good enough to give an early insertion to this letter, as I am anxious to dispel the alarm which the misstatement of the *Lancet* has occasioned to medical students.

I have the honour to be, gentlemen,

Your very obedient servant,

JOHN WATSON,

Secretary to the Court of Examiners.

Apothecaries' Hall; April 18th, 1829.

Webb-street Medical School.

Medals to the meritorious Students of Dr. HOPKINS's Class.—Medals and prizes impartially bestowed upon deserving students are the most judicious incentives to industry: they often succeed in calling into useful exercise that talent which otherwise would have lain dormant; and no doubt the starting point in many a course of successful scientific pursuit has been the rivalry of a contest for such youthful honours. It is, therefore, with much approbation, and with the hope that other teachers will more frequently follow the example, that we notice the adjudication of Dr. Hopkins's annual medals, which lately took place in the Webb street Theatre.

This subject of this year's Essay was "The Symptoms of Pregnancy from the earliest Stage to the Period of Quickening; with a Physiological Explanation of the Mental and Physical Changes produced by the impregnated Uterus upon the System of the Mother."

Seven gentlemen submitted papers for examination, all of which were very meritorious productions; but those of Mr. J. MORLEY and Mr. J. COOPER were declared, by an impartial jury composed of several of Dr. Hopkins's distinguished professional brethren, to be decidedly the best: accordingly, to the former candidate was allotted the gold medal, and to the latter the silver one.

The Essays themselves were indeed very admirable: they proved not only that their authors had profited by the able lectures of their teacher, but that, by the most diligent research, they had made themselves acquainted with the accumulated experience of almost all ages and countries. Dr. COPELAND, who was one of the judges, declared himself perfectly surprised that such Essays should be produced by students; they would not, he said, have disgraced veterans in the profession.

In order to prove to the class at large that the medals were not undeservedly bestowed, the test of a public examination was resorted to; each of the prize men being called upon first to read his Essay, then to explain and defend its reasonings and conclusions, under a rigorous *civa voce* examination; afterwards answering such questions on the obstetric science generally as Dr. H. thought fit to address to them. These examinations were so ably supported as to prove that the respondents were familiar not only with the particular subject of their Essays, but also with the science generally.

The medals are very superb; they are executed by Rundle, of Ludgate hill, in the first style of art. The gold one is very massive, containing four ounces of metal.

We are authorised to state that the vacancies in the medical departments of the Russian army and navy have been filled up, and that foreign medical officers will not be received hereafter into the imperial service.

Foundling Hospital.—Mr. G. J. PERRY was elected surgeon to the Foundling Hospital, on Wednesday, April 1st, in the room of Mr. EARLE, who resigned the office. The candidates were Mr. PERRY, Mr. SKRY, and Mr. TUSON.—Mr. Earle was honoured, on his resignation, by a very flattering vote of thanks from the committee, for the most zealous execution of the duties of his office for the term of sixteen years.

A vacancy has occurred in the appointment of one of the physicians to the General Dispensary, Aldersgate street, by the resignation of Dr. WOODFORD.

PRIZE QUESTIONS.

Société de Médecine de Bruxelles.—"To describe the state of the science of Medicine at the end of the eighteenth century, and to point out the progress that has been made in it, in a practical point of view, until the present time." Prize, a gold medal value 400 francs. Memoirs to be written in Latin, French, or Dutch; and to be transmitted, free of expense, before the 1st of August, 1829, to Dr. J. UYTTERHOEVEN, secretary to the Society, No. 1235, Rue Vinkel, Brussels.—The members of the Society are not permitted to write for this prize.

Société de Médecine de Metz.—1. "Are there any cases in which death may occur without any appreciable organic lesion? 2. This question being answered in the affirmative, to prove, by cases or experiment, the possibility of such a kind of death. 3. To explain the *modus agendi* of the cause or causes of death in such cases."

The Society is anxious that, in the solution of this question, the writers of Essays should endeavour to show the inferences that may be derived from their arguments in a medico-legal point of view.

Prize, a gold medal value 300 francs. Memoirs to be addressed to M. CHAUMAS, secretary to the Society, before the 1st September, 1829.

Société de Médecine de Paris.—A prize of 300 francs, given to the Society by Dr. DENEUX, resident member, for the best essay upon the following subject: "What are the diseases produced by pregnancy? what diseases does pregnancy cure? and what diseases are arrested in their progress by pregnancy?"

Memoirs to be addressed, before the 31st October, 1829, to M. NACQUART, secretary general of the Society, Rue St. Avoie, No. 39.

LITERARY NOTICE.

Compendium of Anatomy.—We recommend to the attention of anatomical students a very correct and well-arranged little work, which has recently been published by Mr. TUSON, under the title of "A Pocket Compendium of Anatomy." Although Mr. Tuson has compressed into a small space the description of the anatomical structure of the human body, he has given a very perspicuous and instructive summary of the subject.

OBITUARY.

DR. ASH.

WE have to record the death of Dr. Ash, at his house, in Foley place, on Sunday last, the result of a debilitating state of health, which had long incapacitated him for the active duties of his profession. He was a Fellow of the Royal College of Physicians, and of the Royal Society, and was educated in medicine under the auspices of the celebrated Dr. Ash, his uncle, the founder of the General Hospital, at Birmingham, and whose full-length portrait, by Sir Joshua Reynolds, adorns the board-room of that charity. After spending the portion of time prescribed by his election to a travelling fellowship of Oxford abroad, and principally in Germany, he settled in London as a physician in private practice, which he continued to within a few months of his

decease, at the age of 65, greatly weakened and depressed in his physical, but not the least in his mental powers.

As a public character, Dr. Ash was little known beyond a select circle of friends, chiefly of the literary and scientific class, by whom he was highly and universally esteemed, as well on account of his strict moral qualities, as his extensive intellectual attainments.

Endowed largely with various stores of knowledge, beyond what are usually acquired in his profession, his habits were yet inobtrusive and unassuming, and his disposition and manners were not well calculated for contention with his brethren in the pursuit of a large and first-rate metropolitan practice, although none probably excelled him in sound professional knowledge, skill, and judgment. In early life he was the intimate friend of Humboldt, and formed an extensive acquaintance with the German schools and professors; in the literature, philosophy, and medical sciences of which he was deeply learned. We have heard it confidently asserted, that the burlesque German tragedy, and some other witty effusions, ridiculing German sentiment and manners, usually ascribed to the late Mr. Canning, were written by the subject of this memoir.

As an author, Dr. Ash is unknown to the public, although in physiology and chemistry, his experimental researches have been very numerous; and his manuscript notes, we have reason to believe, are generally referrible to that extraordinary variety and accuracy of information which he was known to possess in universal literature and science, and which characterized him as a gentleman and a scholar of no common stamp. United to a strong memory, he possessed peculiar talents for the acquirement and communication of knowledge, and which were most effectually and successfully applied to the domestic education of a large family of sons, without at all interfering with his medical duties, and general pursuits. But this habit was apparently the principal cause of his indulging very little in social intercourse with the world, which is generally considered so essentially requisite to ensure fame and eminence in his profession in the present age. Dr. Ash's merits are to be measured by a different scale; and among those who knew him well, we venture to say, his memory will long be cherished with a degree of estimation undiminished by his rare appearance in the *luxurious* circles of London society.—*Med. Gazette.*

DR. LUKE.

We have also to lament the death of this highly respectable physician, who died on Monday last; we believe of diseased heart.—*Id.*

MONTHLY LIST OF MEDICAL BOOKS.

[Medical Works cannot be entered on this List except a copy be sent for the purpose; the titles of Books having frequently been transmitted to us, as published, which have not appeared for weeks, or even months, after.]

An Essay on the Use of the Nitrate of Silver in the Cure of Inflammation, Wounds, and Ulcers. By JOHN HIGGINBOTTOM, Nottingham, Surgeon. Second Edition, much improved and enlarged.—8vo. pp. 204. London, 1829.

On the Varieties of Deafness and Diseases of the Ear, with proposed Methods of relieving them. By WM. WRIGHT, Esq. Surgeon Aurist to her late Majesty Queen Charlotte, &c.—8vo. pp. 295. London, 1829.

Annali Universali di Medicina.

A Pocket Compendium of Anatomy, containing a correct and accurate Description of the Human Body. By E. W. TUSON, Lecturer on Anatomy, &c.—12mo. pp. 289. London, 1826.

Pathological and Practical Researches on Diseases of the Stomach, the Intestinal Canal, the Liver, and other Viscera of the Abdomen. By JOHN ABERCHROMBIE, M.D. &c.—8vo. pp. 396. London, 1828.

A Clinical Lecture delivered to the Students of Surgery in the Royal Infirmary of Edinburgh, at the conclusion of the Winter Course for 1828-1829. By GEORGE BALLINGALL, M.D. F.R.S.E. &c.

•• We shall shortly present our readers with the whole of this very interesting practical lecture.

An Account of the Morbid Appearances exhibited on Dissection in Disorders of the Trachea, Lungs, and Heart; with Pathological Observations, to which a Comparison of the Symptoms with the Morbid Change has given rise. By THOMAS MILLS, M.D. &c.—8vo. pp. 302. Dublin. London, 1829.

Further Observations on the Use of the Lancetted Stilette, in the Cure of Permanent Strictures of the Urethra. With additional Cases. By RICHARD ANTHONY STAFFORD, Member of the Royal College of Surgeons, and lately House-Surgeon to St. Bartholomew's Hospital.—8vo. Longman, 1829.

METEOROLOGICAL JOURNAL,

By Messrs. HARRIS and Co. Mathematical Instrument Makers, 50, High Holborn.

Month.	Rain gauge.	Moon.	Thermom.			Barometer.		De Luc's Hygrom.		Winds.		Atmospheric Variations.		
			9 A.M.	M.M.	P.M.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 a.m.	2 p.m.	10 p.m.
			°	°	°	°	°	°	°	°	°			
March														
20		○	57	59	47	29.44	29.73	55	55	SW va	SW	Fine	Fine	Cloudy
21			55	60	38	.96	.93	55	55	SSE	E	—	—	Fine
22			50	51	42	.71	.62	55	53	SE	E	—	—	—
23			46	49	38	.64	.77	53	50	E	E var.	—	—	—
24			39	42	28	.77	.74	50	53	E	E	—	—	—
25			35	46	35	.80	.80	53	52	ENE	E	—	—	—
26			39	45	39	.83	.83	52	52	E	E	—	—	—
27			45	51	33	.79	.69	52	52	SE	SE	—	—	—
28			40	46	37	.53	.54	50	50	E	E	—	—	—
29			41	46	40	.22	.15	54	60	E	E	Rain	Cloudy	Show'ry
30	.11		44	47	40	.10	.10	64	63	ENE	ENE	Foggy	Cloudy	Cloudy
31			43	44	35	.10	.14	63	60	ENE	NE	Cloudy	Cloudy	Rain
April														
1	.09		40	43	32	.26	.32	60	56	NE	WNW	Fine	Fine	Cloudy
2			56	41	32	.35	.44	56	57	W	W	Snow	Show'ry	Cloudy
3	.08	●	42	48	38	.54	.50	57	57	NNW	WNW	Fine	Fine	Fine
4			48	49	40	.54	.58	57	58	WSW	SSW	—	—	Rain
5			46	54	44	.39	.16	58	59	SW	SW	—	—	Show'ry
6			51	59	42	.10	.04	60	60	SSW	SW	Cloudy	Rain	Cloudy
7	.28		43	54	40	.03	.14	60	61	SW	WSW	Fog	Rain	Fine
8			44	50	38	.28	.27	61	63	SSW	SSW	Show'ry	Show'ry	Fine
9	.03		42	50	40	.06	.16	63	63	SSE	WSW	Rain	Show'ry	Cloudy
10			48	52	40	.20	.40	63	58	SW	WSW	Cloudy	Fine	Fine
11		○	50	53	44	.46	.35	58	58	WSW	S	Fine	Fine	Rain
12	.34		50	57	47	.24	.15	58	59	SW	SW	Rain	Fine	Show'ry
13			54	54	43	.04	.04	59	62	SW	SW	Cloudy	Rain	Cloudy
14	.50		53	57	47	.14	.28	62	56	SSW	S	Cloudy	Rain	Fine
15	.55		51	54	45	.28	.24	59	60	SW va	SW	Cloudy	Cloudy	Fine
16			47	53	40	.29	.21	60	62	SW	NW	Cloudy	Rain	Cloudy
17	.30		51	55	45	.31	.30	62	61	WSW	WSW	Fine	Show'ry	Fine
18	.10		53	56	43	.65	.63	62	61	WSW	WSW	Fine	Show'ry	Cloudy
19		○	57	57	41	.60	.59	62	57	SW	WSW	Fine	Show'ry	Fine

The quantity of Rain fallen in the month of March, was 16.100ths of an inch.

NOTICES.

Communications have been received from Dr. J. WILSON, B.M. (presented by Dr. LUNNETT) and Dr. GORDON.

For the Bodleian Library

THE LONDON
Medical and Physical Journal.

NO. 364, VOL. LXI.]

JUNE, 1829.

[NO. 36, *New Series*.]

For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work, to which the Faculty, in Europe and America, were under deeper obligations than to the *Medical and Physical Journal of London*, now forming a long, but an invaluable series.—RUSH.

ORIGINAL PAPERS, AND CASES,
OBTAINED FROM PUBLIC INSTITUTIONS AND OTHER
AUTHENTIC SOURCES.

STATE OF MEDICINE IN ITALY.

Observations on the Schools, Hospitals, and Practice of Italy. By
G. A. GORDON, M.D. formerly House Surgeon to the Royal
Infirmary, and President of the Royal Medical Society, of
Edinburgh.

No science has undergone so many and sudden changes as that of medicine, and on these have frequently depended the rise or fall of the reputation of medical schools. The day has not long gone by, when, the practice of medicine being conducted rather on empirical principles, than deduced from correct pathological knowledge, the medical schools of Italy enjoyed a higher reputation than those of England or France, and it was considered that a degree from the universities of Pavia and Padua, the most celebrated of Italy, was infinitely superior to that conferred by the universities of Edinburgh and Paris. The times are now, however, changed: the true value of anatomy and pathology is known; and, as these schools have made comparatively little progress in the cultivation of these fundamental parts of the healing art, their reputation has rapidly decayed, and now scarcely a stranger ever seeks a degree from schools whose honours were formerly so highly esteemed.

The MEDICAL SCHOOLS of Italy are numerous and extensive, and are all remarkable for a very strict academical arrangement. The clinical department, by far the most useful, in so far as it instructs young men in the practical

part of their profession, is conducted in a most simple and judicious manner. The patients who form the subject of the clinical lectures are seldom more numerous than twenty, and are kept in a ward separate from the others. In several of the schools, as at Florence, each patient is intrusted to the care of a pupil, who observes minutely the nature of the disease, and the various changes which it undergoes, and makes an accurate report of them, which is read before all the other students, and commented on by the professor, at the bedside of the patient. The professor also gives a lecture daily, which includes a detailed account of each particular case. The limited number of clinical patients is a very great advantage; for, as the history and present circumstances of each are made fully known to the pupil, they are of much greater utility to him than if he were to attend to a crowd of patients, whose diseases he could only imperfectly understand. Those who have pursued the practice of the clinical wards of the Royal Infirmary of Edinburgh, or of the hospital of La Charité at Paris, and experienced the difficulties of understanding and selecting the cases, where the patients are so numerous, may easily conceive the truth of these observations.

All institutions are influenced in a great degree by the government of the country in which they are found. Under a despotic sway, although the general arrangements of universities may be the best possible, yet individual genius is sure to be cramped, and prevented from attaining that splendid and useful height to which, under freer and more favorable circumstances, it is generally seen to rise: and so it happens in Italy, where the arrangement of the medical schools has been fixed by a despotic legislature, and where every thing emanates from the hand of authority, that the professors, who, generally speaking, are men of very ordinary acquirements, seldom rise to their dignities by the force of talent, but are commonly indebted for their elevation to the interest and power of their families and patrons. The moment, too, a professor has attained, by whatever means, to the object of his ambition, he relaxes all his endeavours; for, as he receives the same stated salary whether his lectures attract few or many pupils, and as he has no prospect of rising higher, he has neither the stimulus of money nor ambition to push him forward in the road of improvement. In England, on the contrary, the attainment of a professorship, the value of which depends in a great measure on the reputation of the individual, is only an inducement to further honour and improvement; and

thus it happens that, while the general arrangements and police of the Italian universities are the best possible, the professors themselves are deficient in the desire to promote the welfare of medical science, and consequently their lectures are devoid of that attractive interest necessary to captivate the minds of their hearers.

Of the despotic influence of the government the pupils also largely partake; for, accustomed as they are from their infancy to obey the mandates of authority, they are little suited, when they approach to manhood, and when acquiring medical information, to think for themselves, and to exert ~~their own~~ judgment on the subjects brought forward by the professor, ~~uninfluenced~~ by the particular tenets of any teacher: and thus, as the professor has no stimulus to improvement, and as the previous education of the pupil is such as to prevent him from maturing and strengthening his power of judgment, may be explained the cause, why, with such numerous and extensive schools, arranged too on an admirable system, the Italians, during a great number of years, have made so few improvements in medicine, and indeed have been unable to keep up with the rapid march of other countries.

It is indeed lamentable to see the apathy with which all improvements are regarded in Italy, and nothing struck me with greater astonishment, than the total want of originality of opinion among the pupils, who, with the blood of youth boiling in their veins, are content to follow implicitly the tenets of whoever leads them. The proud sentiment, "*nullius addictus jurare in verba magistri*," is unknown among them. At Edinburgh, which is certainly one of the best medical schools in Europe, (though as a surgical one it is, for obvious reasons, greatly inferior to many others,) a very different spirit pervades the minds of the students; and, although their independence of judgment may sometimes lead them astray, yet in general it has a beneficial tendency, and has frequently sown the germ of important discoveries, and first called into action the talents of some of the greatest men that have adorned the medical profession.

The great universities of Italy are those of Pavia, Padua, Pisa, Bologna, and Rome; and of these, Pavia has long been the most celebrated, and still enjoys the highest reputation. The system of education pursued in it is most complete. To obtain a degree in medicine, the candidate is obliged to have studied for a period of four years, during which he must have attended lectures on almost every

branch of knowledge connected with the science of medicine, and particularly on anatomy and physiology, *materia medica*, and clinical and practical medicine, to which he devotes several courses. He must attend also lectures on surgery, clinical as well as theoretical; and is recommended to make himself acquainted with natural philosophy, natural history, geometry, &c.

The curriculum of the pupils in surgery is on the same extended scale. They devote their time principally to anatomy, physiology, theoretical surgery, clinical surgery, operations on the dead body, midwifery, &c. They also attend lectures on the more immediate subjects of medicine.

Before a student can be allowed to enter to any of these lectures, he must previously have undergone an examination in the more elementary branches of knowledge, such as Latin and Greek; and, at the commencement of each year, he is examined on the subjects embraced by the lectures of the last.

The examination for the degree of doctor is a public one. The candidate draws out of a bag containing the names of the principal diseases of the human body, those of four, which he delivers to the examiners, who immediately catechise him on every point connected with them. He is also shut up in a room, and writes a thesis on one of these diseases, solely from his own knowledge, and without the assistance of any books. The examiners then retire, and afterwards announce their determination to the public, as well as to the aspirant. Nothing can be a surer or fairer way of testing a candidate than this, and I apprehend that it might be adopted at Edinburgh and other schools with very great advantage, where it may have occasionally happened that a professor, going prepared beforehand, has taken undue advantage of the candidate.

After a student has obtained a degree, and before he can legally attend a patient, he must have followed the practice of a large hospital in the same capacity as our house surgeon and physician, for a period of two years; and afterwards have undergone an examination in practical medicine and surgery. Nothing can be more extensive and severe, and at the same time more fair and judicious, than this system of medical education, which is greatly superior to that adopted by any of the British universities.

The great ornament of this school, and indeed of Italy, is the veteran SCARPA, whose splendid talents have enriched, in an astonishing manner, the numerous subjects to which they have been applied. This great man, though

now very far advanced into the vale of years, and nearly blind, continues to prosecute his researches; and the extensive correspondence which he maintains with men of talent in every quarter of the world, is a sure proof that he still lives to science. The subject of aneurism, with which his name is indelibly connected, is the one in which his mind is constantly engaged, and it is said he will soon give to the world some further observations on this interesting disease.

The university of Pisa,* situated in the Tuscan territory, is the one which ranks next to that of Pavia, though formerly Padua enjoyed as high a reputation as any. Pisa has been brought into notice principally by the talents of VACCA, whose premature death the medical profession has had so lately to deplore. The system of education at this school differs little from that adopted at Pavia. The most distinguished individual at present connected with it is SAVI, the professor of botany.

The school of Bologna, indebted entirely for its present elevation to the exertions of TOMMASINI, attracts, for the study of medicine, a great number of pupils, but as a surgical school it is not in much estimation. The clinical instruction here is very extensive. A hospital, capable of containing a hundred patients, is appropriated to this purpose: half of these are, however, surgical cases.

Tommasini explains, at the bedside of each medical patient, every circumstance of his case, and afterwards gives a more general lecture at the university. The great number of clinical patients is rather, however, to be considered a disadvantage than an advantage to the pupils. The lectures of Tommasini, though highly theoretical, are yet replete with information, and are delivered in a very impressive and attractive manner. This great physician was obliged to fly from Parma, his native city, on account of his political writings, but his powerful talents soon procured him an extensive practice in his adopted city.

The university of Rome, called La Sapienza, as a general one is now probably the most complete and extensive on the continent, excepting that of Paris, but as a medical school it is inferior to those already mentioned. The building itself is a most magnificent structure; one, indeed, of the finest of modern Rome: it was designed by the famous

* I am perhaps mistaken in placing the Tuscan university before that of Bologna. It is difficult to determine that point, in consequence of individuals always supporting the reputation of that school with which they have been connected.

Michael Angelo. At this institution no less than forty-seven different lectures are given, the number of professors being forty-three. These lectures embrace, on a very extended scale, every branch of human knowledge. One of the most distinguished professors of this school is MORICINI, professor of chemistry, the friend and associate of the illustrious DAVY.

The HOSPITALS of Italy are also numerous and extensive, but differ much in their police and arrangement. Some of them are admirably conducted, while others again are remarkable for filth, bad ventilation, unhealthy site, and crowded state. In all the hospitals there are a number of young men, from twenty to thirty, who perform almost the same functions as the dressers in the London hospitals, but live in the institution, and are lodged and fed at the expense of government. They also receive about three shillings a month of salary. Each patient, on his admission into an hospital, is provided with a robe, either red or black. The rest of his dress he must procure for himself. The beds in the Italian hospitals are in general formed of wood. The floors of the wards are all of brickwork, which is not washed oftener than once a year, but polished by means of constantly rubbing and brushing.

The principal hospital of Milan is a very large establishment, and well conducted; but none of its medical officers are men of great celebrity, and I observed nothing in their practice peculiar to them alone.

In Bologna, besides the clinical one already mentioned, there are three hospitals, extensive and well managed: from these the clinical hospital is supplied with the choicest cases, medical as well as surgical.

The hospital at Florence, which contains about four hundred patients, is one of the cleanest and best conducted in Italy, and attached to it is a small medical school. The system of clinical instruction here is well worthy of attention. The students are obliged to attend regularly every morning, their names being called over by the professor, who gives a lecture daily, and afterwards holds an examination. The professor of clinical medicine at this hospital, M. NESPOLI, is one of the most intelligent physicians in Italy, and his attention and kindness to Englishmen I feel a grateful satisfaction in recording.

In Rome there are several hospitals, appropriated to different purposes: some of them, as the Consolazione, are excellently managed; while others, as the St. Giacomo, are exactly the reverse. The latter, capable of containing

about six hundred patients, is intended for chronic surgical cases only. It is composed of two principal wards, a male and female; and two clinical rooms, which hold about seven patients each. The male ward is one of the most extensive I have ever seen, and contains, when full, nearly two hundred beds. These are arranged in four rows in the ward, which is not so broad as that of St. Bartholomew's hospital. The patients are kept in a very filthy state. The floors of the hospital are on a level with the ground, and the building is situated in a low and unhealthy part of Rome. From these circumstances it may be readily anticipated that the hospital cannot be a very healthy one; and accordingly I found that, at particular seasons, and especially in the dogdays, erysipelas and hospital gangrene raged to a very great extent. The latter attacks, at those seasons, every wound or ulcer, and frequently produces fatal consequences. The chief surgeon of this hospital is SISCO, who at one time enjoyed the first reputation in Rome, but is now too old to be an operating surgeon. He has done little for the advancement of surgical science. He has published only his *Clinique*, from which I was unable to gather any thing of importance. In it, however, he has given an account of a most enormous sarcomatous tumor growing from the neck, hanging over the shoulder, and reaching nearly to the level of the navel, which he extirpated with success. His most successful operations have been those for the stone, which he extracts by means of the lateral operation of lithotomy performed with a knife, much resembling that of Cheselden. The external incision he makes remarkably small. He is a great advocate against the tying of arteries in cases of aneurism, which he treats, and he alleges successfully, by means of compression. He has invented an instrument on the principle of the tourniquet, which he applies to the artery at some distance above the disease, so as to retard, though not completely to arrest, the circulation of blood through the aneurism. He afterwards applies compresses graduated over the tumor. The professor informed me that he had met with few cases which did not yield to this treatment; a statement which must be received with much qualification. In some instances where he had tied the artery, (previously to adopting this plan,) and particularly where he had followed the practice recommended by his celebrated countryman, Scarpa, of interposing a small compress between the artery and the ligature, he had encountered secondary hemorrhage. On the whole, he prefers amputating to the Hunterian operation. He

prefers also tying the artery at the outside of the sartorius muscle, as being less likely to endanger secondary hemorrhage.

The Consolazione is devoted also entirely to surgical cases, such as accidents and sudden diseases requiring immediate operation. It is composed of two long wards, capable of containing one hundred patients each, one for males, the other for women. It is a remarkably clean and well-ventilated hospital, and affords quite a contrast to the other. It is under the charge of M. TRASMONDI, a very rough though excellent surgeon.

The medical hospitals of Rome are two; one, that of Santo Spirito, for males, and that of St. Giovanni for females. The hospital of Santo Spirito contains about seven hundred patients, and is under the direction of several men of talents and experience. The Clinique of this hospital, conducted by Professor MATHEIS, is one of the best to be met with any where. Professor FOLKI, a most intelligent physician, is also attached to this hospital.

The hospitals of Italy, like those of France, are entirely supported* by the government of the country, which has the entire management of them. No pupil ever pays any fee for being admitted to attend the practice. It would, it appears to me, be a great improvement in the hospital system of England, if these institutions were put under some general laws emanating from a committee of the House of Commons, or from any board of directors legislating for all: for it must be confessed that, even in the best-regulated hospital in England, some abuse, arising from private interest, is ever to be found; and in many of them abuses to a very great extent may be traced. It would also, I think, after having well considered the system of the continental schools, be a great advantage to science and the country, if all medical men, whether students or practitioners, were admitted free of expense, though subject to certain regulations, to see the practice of these establishments.

France, whose hospitals and medical schools are liberally open to the poor as well as the rich student, has derived singular advantages from the unrivalled and extended excellence of her medical men; and the vast improvements which they have introduced, particularly during the present century, into every department of medicine, sufficiently attest the benefits of the system.

* Voluntary contributions are, of course, frequently made to these institutions.

The enormous expense of attending the hospitals of England, and more especially of London, has generally been defended on the ground that it prevents low and uneducated men from attaining a sufficient knowledge of medicine to enable them to practise, and thus renders the profession more select and respectable. This reasoning, however, is selfish and erroneous; for the number of low, uneducated medical men is, I am confident, from my own experience, considerably greater than in France, while the system may be considered as the chief cause of the great number of unprincipled quacks who flourish in England. The disadvantages of it to science and the public are manifest and great. It is a notorious fact, proved by the history of mankind, that the greatest improvements have been introduced by those who have commenced from very humble beginnings; and a review of the history of the present most celebrated medical men in France accords with that statement. In London, the hospital surgeons and physicians are, in general, men of very extensive knowledge; but the great mass of practitioners, it will be admitted by every one at all conversant with the state of the medical profession in France, are greatly inferior in point of acquirements to their brethren in that country.

The MEDICAL PRACTICE of Italy is certainly greatly deficient in most of the grand points which are generally supposed to form the glory of English practice. An ignorance of, and inattention to, pathology is universal in Italy. Diseases are treated more according to the rules of systematic writers, than from a firm conviction of the dangers arising from a change in the structure of the organs of the body: symptoms are combated more than the actual disease; and hence it follows that the diagnosis of Italian physicians is frequently incorrect; their practice always feeble, often inert; and their remedies applied late, and with a sparing hand. From this general view of their practice, it may be readily conceived that their success is, in comparison with English practice of medicine, very limited; and I have little hesitation in stating that I have seen many patients die in the hospitals of Italy, who would undoubtedly have been saved by a more vigorous practice, such as that followed in England. Bloodletting, the grand sheet-anchor in acute disease, is used in a style throughout Italy, and more particularly at Rome, which must astonish every enlightened mind. Blood is drawn away in a small stream, in quantities from six to twelve ounces; the greatest care being taken to prevent *deliquium animi*, which is reckoned

a very bad circumstance. These small bleedings are very frequently repeated, sometimes three or four times in the course of twenty-four hours, but, as may be well imagined, with little effect. In the course of an acute inflammation, the Romans perhaps abstract more blood than an English physician would do, but by no means with the same benefit; for it is an axiom in the practice of medicine of England, that a copious and well-managed venesection at the commencement of acute inflammation will be of more use, than numerous small ones during the progress of the disease.

The next most powerful remedy in subduing acute inflammation which we possess is the tartrate of antimony, and one which is in general estimation in England. The application of this remedy, in the treatment of inflammation, is little employed in Italy: at least, during my visit I never happened to see it used.* The kermes mineral, it is true, is in very frequent employment; but this more as a diaphoretic than employed in nauseating doses to depress the powers of the circulating medium. Decoctions of sarsaparilla and sassafras, and a variety of inert drinks, with numerous emollient clysters, are the means in general use. Purgatives to any great extent are not given; two or three grains of calomel being the strongest generally employed.

There is part, however, of the medical practice of Italy in inflammatory affections well worthy of attention, and that is the very strict attention to diet and regimen; a thing of the greatest importance in the treatment of all diseases, and one to which little attention is paid, comparatively speaking, in England.

Percussion and the stethoscope, the use of which has undoubtedly paved the way for those great discoveries of the pathology of the pectoral viscera, for which the world is indebted to the indefatigable talents of LAENNEC, are never employed in the hospitals of Italy; and, consequently, the Italian physicians are unable to form that accurate diagnosis of the various shades of disease to which these organs are so liable, and from which alone can be deduced a proper and certain method of cure.

It is very generally supposed in England that, owing to the mild and salubrious climate, phthisis pulmonalis is a

* Mr. NORTH has referred me to the Medico-Chirurgical Review for March 1822, p. 752, in which it is said that Dr. CARLO BELLATTI, a distinguished physician at Pavia, was in the habit of giving enormous doses of the tartar emetic: half a drachm to three drachms daily. This is certainly however, not the general practice in Italy at the present moment.

very rare disease in Italy. This, however, is a very ill-founded opinion; for in every part of that country it is a very common complaint, and differs in no degree from that which is so great a scourge to the British isles.*

Fevers of every kind are numerous in Italy, and differ in their type according to the season of the year, but in general are complicated with affections of the chylopoietic and assistant chylopoietic viscera. Their treatment differs in little from that followed in England, and is in general very successful.

Italy is the country to study intermittent fever, which, during the summer and autumn, rages to a very great extent, and numerous cases of which, under a secondary form, are always to be found in the hospitals, even during the most wintry season of the year. The Pontine marshes, situated between Rome and Naples, are the most fruitful source of this form of fever, and during the season the hospitals of Rome, as well as those of Naples, are filled with cases produced by exposure to the malaria of these marshes. The spleen is, in general, the organ most affected. The liver, also, is very frequently attacked.

Some very excellent observations have been published on the composition of the atmosphere of the Pontine marshes, and particularly by M. BROCHI, in conjunction with Professor MORICHINI; from which it appears that these excellent chemists were unable to detect any change in the composition of the air, except the addition of some aqueous exhalation in the worst places, and at the worst seasons of the year and periods of the day. From these observations, and those of Professor FOLKI, of Rome, it is also shown that an uniformly dry and warm state of the atmosphere is the freest from fever, and that the most numerous cases occur when rains are succeeded by intense heat.

The worst periods of the day are immediately before sunrise and immediately after sunset. Sleeping in the "mal'aria" is almost certain to induce intermittent fever. Woollen clothing, as flannel, is stated to be a great preservative against taking the fever; a fact well known to the ancient Romans.

Professor Folki denies, in toto, the existence of any peculiar obnoxious principle in the atmosphere of marshy grounds, and observes, that he considers the disease to be sufficiently accounted for, by the aqueous vapour condensing and producing cold, by the fall of the temperature of the

* In the Papal territory it is considered to be an infectious disease, and the police are extremely strict in burning the clothes of the dead, and in fumigating their apartments.

atmosphere at sunset, and by the cold wind, which frequently prevails, acting on a system out of order from irregularity of living or other causes. The Professor, who has been long engaged in researches into every point connected with this fever, considers the proximate cause of it to be a want of equilibrium between the electricity of the atmosphere and that of the body; a theory which he has sustained in a very plausible manner, though the reasoning rests rather on negative than positive evidence.

In an admirable clinical lecture by Professor MATHEIS on this subject, at which I was present, he observed that he had never seen a well-marked instance of the disease produced for the first time during the cold months of the year, and he was inclined to deny its possibility altogether. But during my stay at Rome I had an opportunity of seeing a well-marked instance. Dr. FLEMING, of Manchester, was exposed, on the 12th of December last, the weather being at the time cold, to the influence of the malaria of the Pontine marshes. He was kept in the open air for an hour at midnight, at Teppacina, a small town at the frontier of the Roman territory, while his baggage was examined by the revenue-officers. He experienced at the time a sensation of cold, and next day had a most severe and well-marked attack of fever, which assumed the quotidian type, and was an extremely severe case. He suffered from it, more or less, for three months. I narrated this case to Professor Folchi, and he observed that he conceived it not impossible that a foreigner, unused to the air and climate of Italy, might be attacked even during winter; but he had, during his long acquaintance with the disease, never seen a single primary case during winter in a native of the Papal dominions.

Bark and sulphate of Quinine are the only remedies ever employed in Italy in the treatment of intermittent fever, and they are considered as specifics. The former, to the extent of half an ounce per day, is given in hospital practice, as being more economical; the latter, to the extent of six or eight grains a day, to private patients, as being a more agreeable, and perhaps more efficacious, form. Arsenic and opium, I was informed, are never employed during any stage or shape of intermittent fever. Secondary attacks of intermittent fever are not uncommon during the cold weather, and I saw numerous instances in the hospitals.

SURGICAL PRACTICE.—The general surgery of Italy, during later times, has made but little improvement, notwithstanding the writings of Scarpa and Vacca, and the

facility with which the best authors of England and France are procured. The grand defect in Italian practice is the ignorance of the surgeons of the laws of nature in reference to the healing of wounds; laws which undoubtedly ought to be the basis of practical surgery, and a knowledge of which, first completely developed by the masterly genius of JOHN BELL, has raised English surgery to the eminent and successful state in which it is at present found.

The surgeons of Italy are still sadly ignorant of the facility of curing wounds, whether arising from accident or surgical operations, by what is called the first intention; and this may be considered the grand defect of Italian surgery, and one which pervades the whole practice. Thus, whether a mamma be extirpated or a tumor excised, the wound is stuffed with lint, and the patients, if they escape the violent inflammation which too often follows, are subjected to an extensive suppuration and long process of cure. All ulcers in Italy are dressed in the same way; that is, covered with charpie. The method of BAYNTON, the application of stimulants, and the use of constitutional means, as far as I could observe, are little, if at all, employed. The lunar caustic is sometimes employed to check granulations; but this is the only substance I have seen used in any of the hospitals of Italy. In amputations, however, it must be allowed, they adopt the English system of union by the first intention. At Rome, and in general throughout Italy, the circular amputation, "*en deux tems*," is the one employed. The following is the method: A tourniquet (and those instruments in Italy are of a very miserable description,) is applied to compress the artery, at a very short distance indeed above the disease for which the amputation is performed. (This is a very great defect; for it frequently happens that the surgeon performs his incisions in diseased parts; or, if they are sound, he leaves too little to cover the bone.) A ribbon is then placed round the limb, to mark the point where the incision is to commence, and, by compressing the nerves, to prevent the pain as much as possible. The Italian surgeon, then, with a *large scalpel*, performs the circular incision in the usual way. (The scalpel is another great defect.) The ribbon is then withdrawn, and the muscles divided. The surgeon then ties the artery; and this is managed* in a style quite abhorrent to the genius of English surgery: a broad ligature is employed, and artery, veins, and a large portion of the muscles, are included. (The frequent consequences of such

* I here speak more particularly of the practice at Rome.

treatment need not be exposed.) The edges of the wound are then brought into contact by means of adhesive plaster.

There is one small circumstance connected with the dressing of wounds, which struck me as particularly neat, and which is perhaps of considerable importance, viz. the method of using adhesive straps. The strap is cut very broad at the extremities, and narrow in the centre, so that it is enabled to take a firm hold of the edges of the wound, and exert a considerable power in retaining them in contact, while large spaces are left between each slip in the middle, which permits the free discharge of the pus and ligatures.

This is a practice which, I apprehend, might be adopted in many cases of wounds in England, and particularly in those caused by the great operations of surgery, with very considerable advantage.

The Italian treatment of injuries of the head is in many cases too active, while in others patients are often lost from deficiency of vigor. Thus, in many of the hospitals of Italy, the system of trepanning, nearly as recommended by POTT, is pursued; but in patients attacked with that very common and insidious inflammation of the membranes of the brain, which is the result of external injury, and where the most vigorous depletory treatment is required, their measures are in general limited to one or two small bleedings, to the exhibition of a few purgatives, and the employment of drinks and decoctions of no avail.

Fractures of the extremities, in most of the hospitals of Italy, but particularly in those of Rome, are treated in the straight position. M. TRASMONDI, one of the principal surgeons of that capital, informed me that his success was very great, and that he had come to the determination, from the results of an extensive practice, of employing that position in every instance. But nothing, surely, can be more erroneous or empirical than to lay down a general rule for the treatment of all cases, of whatever kind. In many instances of fractures of the inferior extremities, the perfectly straight position may undoubtedly be employed with the best success; but in many others, and indeed by far the greater proportion, the flexion of the knee is infinitely preferable: such, at least, is the opinion of the great hospital surgeons of England and France.

The number of cases of erysipelas, in some of the hospitals of Italy, is very great. They are treated invariably on the antiphlogistic system. In severe cases of the acute phlegmonoid erysipelas, bleeding, to the extent of eight or

ten ounces, is practised, and purgatives and the kermes mineral are exhibited. The stimulating plan is, I believe, never employed; and Mr. LAWRENCE's method of incision is unknown. Where gangrene, however, has supervened, the Italian surgeons frequently make small scarifications, with the view of favoring the separation of the dead parts from the living. Their practice, as will be readily admitted by every enlightened surgeon, is founded on correct views of the disease, and is eminently successful.

Hospital gangrene, which is now rarely seen in England, in some of the hospitals, and in particular in that of St. Jacomo at Rome, is not uncommon, and produces the same train of fatal symptoms which marks its progress under every circumstance and in every clime. In the hospital of St. Jacomo it rages frequently to a considerable extent, particularly during the heat of summer; and even during winter I had an opportunity of seeing one or two instances of it. The Italian treatment of this disease consists in nourishing, supporting, and stimulating the system by every means in the power of the surgeon, by the exhibition of wine, opium, bark, sulphate of quinine, and other tonics. The wound is dressed simply with lint.

In the treatment of aneurism, the Italians seem to be exceedingly far behind. Their surgeons are timid, and unwilling to adopt those bold but successful operations which have shed such a brilliant lustre over the English surgery of the present century. During the time I spent in Italy, I did not hear of a single case where even the simpler operations for aneurism had been adopted; and many of the more difficult ones, but which are yet successfully employed in England, are unknown. Thus the ligature of the sub-clavian and external iliac arteries, operations which (it may almost be said) are in daily use in England, have never yet been attempted in Italy. The treatment of aneurisms consists commonly in palliative means. Compression is the most powerful of these, and it must be allowed is often employed with great advantage, and occasionally so as to effect a complete cure. It appears to me that this remedy is greatly too much neglected in England, and that surgeons, led away by the *éclat* of brilliant operations, do not pay sufficient attention to more simple and less dangerous means, and which are yet often completely successful. The method of Professor Sisco, already alluded to, is that generally adopted. I had an opportunity of seeing three cases of aneurism, under the care of M. FLAJANI, in the hospital of Santo Spirito, treated in this way, and which

seemed to be undergoing a process of cure. They were all incipient forms of the disease.

The method of tying arteries recommended by the veteran SCARPA, has now fallen into disuse.

Different operations are performed for lithotomy in the different hospitals of Italy. In Tuscany, and particularly at Florence and Pisa, the barbarous operation of the gorget is in general use. At Milan, the *bistoiré cachée* of the French is commonly employed; and at Rome the simple operation with the knife, nearly as practised by Cheselden, is that adopted. In all these schools, the surgeons agree in one point, that of making the external incision remarkably small. The fatality of the operation is said to be about three deaths in twenty throughout Italy.

If the stone be large, the recto-vesical operation of Vacca is preferred to the high operation, which is at present scarcely ever practised in Italy. The operation of M. Civiale for "*la broiement de la pierre*," and which certainly in a great number of patients may be employed with advantage, has not yet been introduced into use in Italy. In cases of stone in the female bladder, the operation by incision is adopted in preference to that by dilatation.

The operations for hernia are performed in Italy nearly in the same manner as in England, with this difference, that they are commonly performed too late. Two cases came under my notice at Rome, where a strangulated inguinal hernia had existed for three or four days when the patients were admitted into the hospital. The operations were not performed, in one, for twenty-four, and in the other for thirty-six, hours after, and in both the gut was found gangrenous, and death ensued.

The venereal disease, which bears in Italy precisely the same characters which mark its progress in England, is treated in a very mild, judicious, and efficacious manner. In cases of primary sores, calomel and blue pill are exhibited in small doses. When the constitution is tainted, the oxymuriate of mercury is given to the extent of the sixth of a grain for a dose.* These preparations are administered with much care and caution, and are never continued to such a length of time as to injure the constitution. Decoctions of sarsaparilla and sassafras, and other herbs of a similar nature, are given in conjunction with them, and the patient is enjoined a moderate, and frequently milk, diet.

Cases of venereal disease are by no means so common as

* This is particularly praised by Professor TAGLIABO.

in England; nor have I ever seen, in any part of Italy, such extensive ravages from the disease as in Britain.* In general the regulations of the police are extremely severe against women contaminated with this disease, and in the papal dominions no prostitutes are permitted; the moment females are discovered exercising this infamous profession, they are thrown into prison.

MESMERISM.

Observations and Experiments on Mesmerism. By RICHARD CHENEVIX, Esq. F.R. and E.S. M.R.I.A.

It is by no means the desire of those who are convinced of the truth of mesmerism to urge belief upon their mere assertion, but to excite curiosity; to turn the public mind toward this powerful agent, so true, yet so much despised; and to engage some inquirers to lay aside their preconceptions for a moment, and have recourse to fair experiment. The difficulty of overcoming the first disbelief, the first repugnance to actual trial, is extreme; but, as the authority of some respectable medical men, whom their own senses and their own experience have induced to practise this art, may contribute to remove it, the following cases are submitted to the public:

“ Ballynacarig (Ireland); February 5th, 1829.

“ Dear sir,—In the month of September last, a few days after I had first witnessed the wonderful effects of mesmerism in your hands, I happened to pay a professional visit at Mears court, in this neighbourhood. While there, I learned that a man, named Hubert Gainer, was at the point of death.

“ I should inform you that this man, for the last four or five years, had been continually under my care, in the dispensary, for very bad dyspepsia, particularly marked by the most obstinate state of the bowels, requiring generally a double quantity of the strongest purgatives every three or four days.

“ On arriving at his house, I found him stretched out in bed, with the stomach inordinately distended, and his thirst excessive. His extremities were cold, his countenance ghastly, his pulse small and quick, his tongue white; his bowels confined for the last five days. He was writhing in torture from pain in his stomach. I learnt, on inquiry, that he had had no rest for the two preceding nights.

“ Though at that time I was far from believing in the practical

* I ought to mention that I have not visited Naples, where the disease is said to assume a particularly severe form, and where some have asserted it first appeared. Throughout Italy it is termed “la malattia Francese;” thereby pointing out the source whence it came into this country.

utility of mesmerism, yet finding that in the case of this patient something should be done immediately, I proceeded to try my hand at mesmerism, in imitation of what I had seen you do. After some time the man grew quiet; when, with the hope of exciting the stomach to action, I directed my intention particularly to the epigastric region. Continuing this for two or three minutes, the man turned round suddenly, and, to my surprise, vomited an immense quantity of liquid, (the most acrid bile.) He then threw himself back into a profound sleep, which continued for an hour and a half. At this period I gradually awoke him, when he was evidently better in every respect. Leaving directions that his wife should report his case to me in the dispensary next morning, I took my departure. By the account I received the following day, I found that he had slept soundly, and that his bowels had been freed three times in the night: in short, his wife reported next morning that he was perfectly well. In a few days I called to see him, and found him complaining of weakness only; but his bowels were again confined, and again I had recourse to mesmerism, with the same good effect.

"I resorted to mesmerism in this man's case but three times in all, and he is, as I have seen this day, in perfect health; neither have I had occasion to give him any aperient medicines since the first application of this surprising influence.

"As the above case appears, to me at least, highly interesting, I take the liberty of giving it to you somewhat in detail; and have the honour to be, dear sir,

"Your most obedient servant,

"R. COTTER, M.D."

"To Richard Chenevix, Esq. Sonna."

Michael Donally had been attended for some time by Dr. Cotter, who pronounced him to be far advanced in rapid consumption. He was taking small but repeated doses of tartar emetic and digitalis. On February 11th, I mesmerised him for the first time. He was in bed, and exceedingly weak; his voice was hardly audible. The only sensible effect produced during the operation was profuse perspiration.

Feb. 12th.—After I had left him yesterday, he slept for about an hour, and, on waking, found his cough and breathing easier. He had left off the tartar emetic and digitalis, as well as all other medicines. Mesmerised him thirty minutes, with the same effect as yesterday.

Feb. 13.—Found him going on very well. His voice was stronger, and he seemed more alive than I had yet seen him.

As I could not visit him every day, I instructed his wife how to proceed and desired her to mesmerise him night and

morning, during thirty minutes each time. I also informed Dr. Cotter that I had undertaken this desperate case, adding a hope that we still might save the patient. Dr. Cotter's reply was, "If the poor man is saved, I will substitute the pronoun *you* for *we*."

Daily accounts were brought to me of the progress of this man until February 27th, when I called upon him, and found him up and dressed. He received me at the door of his cottage, spoke with a strong, firm voice, looked healthy, and said he was nearly recovered. I told his wife to persevere in the mesmeric treatment.

March 16th.—He came to see me, and looked quite well. I mesmerised him for a few minutes: he slept, and even showed some interesting phenomena. I urged his wife to continue the treatment some time longer; for mesmerism, when persevered in after the cure is effected, is never dangerous.—This case can be attested by at least twenty witnesses of the first respectability.

The two following cases were communicated to me by Mr. LEVINGE, of the Royal College of Surgeons, Dublin, with permission to publish them:

February 9th, 1829.—Mary Spotten, æt. sixteen, had for several months been complaining of a severe and continual pain in her back, with a fixed and numb sensation shooting from the bottom of the abdomen down the inside of the thighs. She was much emaciated; her countenance was pale and yellow; her appetite quite lost. When I first prescribed for her, about six months ago, she was essentially relieved; and in a short time the regular discharge appeared, but in small quantities.

"After this time I did not see her for two months, when I learnt from her mother that she was as ill as ever. A considerable period then elapsed, during which nothing was attempted for her. I had, in the mean time, heard much of the salutary effects produced by mesmerism under the care of Mr. Chenevix, and, through the kindness of this gentleman, had seen two or three of his patients who had been cured by him, and many others who had been considerably relieved. Instructed by him respecting the mode of applying the mesmeric influence in these charitable performances, my opinion, which had hitherto been strongly prejudiced against the doctrine, became so changed, that, on returning home, I sent for this girl, and commenced to try mesmerism upon her. The operation was repeated daily at the same hour, and continued for thirty minutes each time. The first days she did not sleep, but said she felt as if her heart had ceased to beat. After a few repetitions of the operation, however, sleep came on regularly, and usually continued while that lasted. Now and then, on awaking, she complained of vague pains in her head, belly, and legs; but

they immediately ceased when I directed my attention to those parts. During this time she took not one particle of medicine, but every day she drank a quart of mesmerised water. At the end of one month she was discharged cured; but the treatment appears not to have been continued long enough, for, during a suspension of it, necessarily caused by my absence, her illness has returned.

"Biddy Connell, æt. eleven, had for some time been afflicted with cough, loss of appetite, and slight bronchitis, and had passed several small worms. About three months since, she applied to me for relief. Every day, for three weeks, I performed the operation of mesmerism upon her during thirty minutes. After the first four days she passed many worms, and felt much better;* her cough began also to diminish gradually. At the end of a fortnight, the quantity of worms which she had voided was very great, and the relief which she experienced was as remarkable. She also drank magnetised water. After the treatment had been continued for three weeks, I was obliged to go to Dublin; but the girl was recovered; neither has she had any return of her illness since that time.

"This patient did not sleep more than two minutes at a time; and, as soon as she opened her eyes, she seemed as completely awake as if she had not slept at all."

The following is extracted from an intended publication, now preparing for the press, and in which the results of experiments and observations made upon 442 patients will be detailed. Ten months were devoted to these laborious but interesting investigations, and six, eight, sometimes ten hours a day, were allotted to their prosecution uninterruptedly.

A common opinion among persons who admit the truth of mesmerism, but who are little acquainted with its practice or effects, is that it is most efficacious upon nervous temperaments. Having tried this agency pretty extensively upon other disorders, and having been led to an opposite conclusion, I was anxious to put it to the proof in a disease which may be considered as the very epitome of nervousness, insanity. With great eagerness I embraced an opportunity offered to me by the kindness of Mr. HIGGINS, whose name, so well known among the benefactors to that wretched class of beings whom malady has deprived of reason, deserves to be remembered as long as humanity exists among men. Informed of the power of mesmerism, and satisfied as to its general truth, Mr. H. proposed to me to try it in his neighbourhood, where I then happened to be,

* I have myself cured seven cases of worms.

in the lunatic asylum of Wakefield, in Yorkshire; an establishment where madness ceases almost to be a misfortune, which, in any other country of Europe, would be extolled as one of the greatest of national monuments, but which in England rears its immense but modest bulk in a sequestered vale, and is hardly heard of beyond the district where it spreads its blessings. Thither Mr. Higgins had the goodness to accompany me, and there, under the auspices of Dr. ELLIS, physician to the establishment, the experiments were made. The subjects selected for trial were two males and eight females. One of the males was furious and manacled. The first ten minutes produced no sensible effect upon him; but afterwards his head twice sunk down upon his chest, with an evident tendency to somnolency, which, however, was soon disturbed by his suddenly starting up almost as frantic as before. Two women, afflicted with melancholy, were tried, but with no sensible effect: neither was the success more apparent upon any of the remaining subjects, two only excepted.

A woman, whose reason was much less subverted than that of the other patients, said that every time I drew my hand before her, she "felt life going down through her body along with them," to use her own words; a feeling analogous to that which many delicate persons have described.

A girl, aged eighteen, epileptic as well as insane, showed symptoms of somnolency in one minute after the operation began; and during half an hour, which it lasted, was three times in mesmeric sleep. But she always started suddenly out of that state, into which she again fell in one minute. One general effect, however, struck all the attendants who accompanied these patients in the room where the experiments were made. A state of calmness was produced as soon as the passes began, and continued during the whole operation. Even the furious man became more sedate while under the action of mesmerism; and a girl, who never could be prevailed upon to remain quiet, required less coercion from her attendant than in ordinary circumstances. The trial upon each patient never exceeded thirty minutes; and these experiments can by no means be considered as conclusive respecting the therapeutic effects of mesmerism upon insanity. Neither were they intended to be so. The object was to compare the immediate physiological influence of this agent upon persons in a healthy and in a deranged state of mind: and even in this point of view they are of very limited value. As far, however, as

one trial, of half an hour each, upon ten insane persons, can authorize an inference, it must be concluded that the influence is considerably less upon them than upon persons of sound mind; and still less again than upon persons inflicted with other infirmities. Two medical gentlemen attached to the establishment, together with Dr. and Mrs. Ellis, were present at these trials; and, if the reality of mesmerism had hung upon the results, the science would be in a sad plight. The effects were so weak as hardly to be perceptible to persons wholly unacquainted with mesmeric phenomena, whose inexperience well might question their existence, and whose preconceptions would allow them to discern nothing but failure in all that occurred. Neither was conviction expected to follow these trials, or any other consequence but a comparison between persons sane and insane. But truth, though often clouded, will burst forth; and a little triumph was reserved for that which is the great guide of man, in a world where the utmost light he can attain is just enough to make darkness visible.

In the evening's conversation, Dr. Ellis mentioned an extraordinary complaint to which he was subject in his stomach. I requested to mesmerise him for fifteen minutes. At the expiration of two minutes his countenance became flushed, his eyes a little bloodshot, and he smiled; he soon afterwards closed his eyes. When the fifteen minutes were elapsed, seeing that he was not asleep, I asked him how he found himself? "I never felt so comfortable in my life. I feel as if I should like to remain in this state always, and never more to move hand or foot." "Pray let me ask you," said I, "why you smiled at the end of two minutes?" "I smiled to find all my incredulity oozing out of me." "You do, then, from your own feelings, acknowledge an effect in mesmerism?" "I do; I must." Dyspeptic cases are among those in which I have found the curative influence of mesmerism the most prompt and efficacious.

It must not be concluded from the above that mesmerism is ineffectual upon insanity. In the "*Exposé des Cures opérées en France par le Magnétisme Animal*," two vols. a work indispensable to all who study this science, eight cures are instanced as effected by a continued treatment. Among sixty-seven epileptic patients whom I myself have treated, two were afflicted with mental derangement, and many with temporary alienation, for several hours after each epileptic paroxysm. In no one instance did the latter symptom fail of being alleviated. In the two insane sub-

jects, the intensity of both diseases was diminished; but, though one patient was magnetised fifty-four times, and the other seventy-six, neither was entirely cured. As I left the country where they resided, the continuation of the treatment was confided, with proper instructions, to their relations.

From the very extraordinary power which mesmerism possesses in other diseases, it is much to be hoped that it may be tried in insanity also; and that no prejudice, no sneers of wilful ignorance or of invincible presumption will longer oppose the application of a means, which, in every other country in Europe, has been practised with miraculous success; which reckons thousands of converts in Germany, Switzerland, Italy, Holland, and France; and which has been admitted by Hufeland, Jussieu, Cuvier, Ampere, and Laplace.

The preceding extract was submitted to Dr. Ellis for his sanction, and the following answer was returned:

"Wakefield Asylum; April 9, 1829.

"Dear sir,—I have carefully read your extract, and find it perfectly true and candid. For myself, I have no hesitation in declaring that I felt very sensibly affected by the operation; for, where truth and science are to be promoted, no fear of being laughed at shall ever deter me from avowing my sentiments. I have no doubt, too, that I should have fallen asleep if we had been alone; but, surrounded as we were by so many spectators, the very consciousness of feeling the sensation coming upon me, as you truly observe, made me smile, and aroused me. I am too ignorant upon the subject of mesmerism to say any thing upon it that is worth your attention; but, on reflecting upon it, it has struck me that there must be a great difference in the susceptibility of persons being affected by it, according to their states of health, temperaments, &c. All circumstances relating to it should be carefully noted down; and, as soon as you have put the matter into a tangible shape, I shall certainly give it my most serious and candid attention."

Since the experiments were made at Wakefield, I have repeated similar trials in some ordinary hospitals, in the presence of several spectators; and the results obtained have induced me to modify my opinion respecting the limited success which attended them in that institution. The state which mesmerism tends to produce is a state of quietude and calmness. Numerous witnesses disturb and annoy both the patient and the operator. The latter, too, becomes uneasy at seeing his patient agitated, and his anxiety takes away from him the power of concentrating his

mind; a condition far more necessary to produce effects than any mental state of the person acted upon. It is then possible that the spectators, whose presence was an annoyance to Dr. Ellis, may have disturbed the insane patients; and that insanity may be as susceptible of mesmeric influence as any other disorder. We are at present, with regard to mesmeric knowledge, nearly in the same state as was the first man who saw a straw attracted by a piece of amber, with respect to electricity.

Three medical practitioners, two M.D.'s and one surgeon, were thus convinced of the truth of mesmerism by experiments made either by them or on them: and experiment is the test to which the proselytes of this doctrine demand that it should be put. Their first cry is for experiment; their second for experiment; their third for experiment.

The ignorance of the medical world in this country upon mesmerism is as great as the precipitancy with which the question is prejudged. Every work upon it current either in Germany or France, has been slighted and despised. The accounts published at Berlin of the cures performed in the Mesmeric Hospital there, since 1815, have not been listened to. The extraordinary case of Mademoiselle Samson, witnessed successively by thirty-two physicians of the Faculty of Paris, at the Hôtel Dieu, is unknown here, though it has been the subject of so much discussion there. The still more wonderful cure of Paul at the Charité, though attested by near two hundred credible witnesses, has met only with contempt from the very few medical men in England who have ever heard of it. The deliberations of the French Academy of Medicine, in which nearly one half of its members confess that they have seen and believe mesmeric phenomena most marvellous and important, have never been laid before the British public as they should have been. The common opinion is that mesmerism still is what it was forty-five years ago, and that it was then laid to rest for ever by the report of Bailly, Darat, Lavoisier, Franklin, &c. This article shall be concluded with an extract from that report, and with the more recent opinions of two men, whose authority even sceptics must respect. The words of the report are as follows:

“ The patients (submitted to mesmeric experiments,) present a very varied picture of results. Some are calm, quiet, and perceive no effect; others cough, spit, feel slight pains, partial or general heat, and perspire; others are tormented and agitated by convulsions: those convulsions are extraordinary for their force and duration. As soon as one convulsion begins, others declare

themselves, and your commissioners have seen some which lasted more than three hours. Nothing can be more astonishing than the sight of these convulsions. He who has not beheld them can form no idea of them; and, even in beholding them, one is equally surprised at the profound repose in which some of the patients are plunged, and at the agitation which animates others. It is impossible not to recognize in these effects, *which are constant*, a great power which agitates the patients, which ever masters them, and of which *the person who magnetizes seems to be the depository*. This convulsive state is improperly denominated *crisis** in the theory of animal magnetism."

This is the report which the present opposers of mesmerism invoke, as having given an eternal quietus to the science, and in which they say that the phenomena are denied. Yet even this report, far as it is from not admitting mesmeric facts, and from countenancing the interpretation which is often given of it, as great a man as any who signed it, JUSSIEU, thought unworthy of the subject, and made a contradictory report. Jussieu,—aut deus, aut Jussieu,—well accustomed to interrogate nature, instituted separate experiments, which fully proved the reality of mesmerism, and authorized the conclusion that imagination plays as great a part in mesmeric phenomena as in any other physiological phenomena, and *no greater*. The fact is, that ninety-nine experiments in a hundred refute the hypothesis of imagination.

Let M. CUVIER now be heard. In the 117th page of the second volume of his Comparative Anatomy he says, "It must be confessed that in all experiments, the object of which is to determine the action which the nervous system of one person may have upon the nervous system of another, it is difficult to distinguish the effects of the imagination of the person acted upon, from the physical effects produced by the person who acts. Yet the effects produced upon persons who, before the operation was begun, were in a state of insensibility; those which have taken place upon other persons, after the operation itself had reduced them to that state; and also the effects produced upon animals, no longer permit it to be doubted that the proximity of two animated bodies, in a certain position, and with the help of certain motions, do produce a *real effect*,

* The modes and the results of mesmerism have been almost as much modified since 1784 as those of electricity since the days of Pliny, and convulsions now are unusual phenomena. Of 442 patients whom I have mesmerised in ten months, and sixty-seven of whom were epileptic or hysterical, but eight had convulsions. These belonged to the latter sixty-seven, and the paroxysms were very speedily relieved.

wholly independent of the imagination of either. It is also evident that these effects are entirely owing to a communication which takes place between the nervous system of the two parties."

The last evidence which shall now be heard is LAPLACE. The words (translated) of this great man, in his "*Traité analytique du Calcul des Probabilités*," page 158, are, "The extraordinary phenomena which result from the extreme sensibility of the nervous system in some persons, have given birth to a variety of opinions on the existence of a new agent, denominated animal magnetism. It is natural to suppose that the influence of these causes is very weak, and that it can easily be disturbed by accidental circumstances; but it would be unfair to conclude that it never exists, merely because in many cases it does not manifest itself. We are so far from being acquainted with all the agencies of nature, and with their different modes of action, that it would be unphilosophical to deny the existence of phenomena solely because, in the present state of our knowledge, they are inexplicable to us." I have myself had more than one conversation with M. Laplace upon this subject, about the years 1816 and 1817, and his expression constantly was, that the testimony in favor of the truth of mesmerism, coming with such uniformity from enlightened men of many nations, who had no interest to deceive, and possessed no possible means of collusion, was such that, applying to it his own principles and formulas respecting human evidence, he could not withhold his assent to what was so strongly supported.

Now, though the superiority of British intellect has no more strenuous advocate than myself, I must say that it would not disgrace the greatest man whom England ever has produced to attempt an experiment or two upon a doctrine which Hufeland, Jussieu, Cuvier, Ampere, and Laplace believed. Nay, would it not disgrace him more to condemn, without knowing any thing about it, what they knew and credited? Is supercilious ignorance the weapon with which Bacon would have repelled a new branch of knowledge, however extraordinary it might have appeared to him? and would not Newton have repeated the experiments of Euler and of Dollond, before he would have dared to deny them? Surely, what great men believe ordinary men may try. Then, if they err, they will have noble companions, with whom it may be an honour to go astray: if they are right, they will stand with mighty minds and truth upon their side.

If mesmerism be wilful deception and juggling, this is the country whose duty it is to expose the imposture. If it be venial error and delusion, England, the chief supreme of intellectual judicature, should rectify it. If it be true, she should not be the last to acknowledge it. But, mesmerisers come forward under the broad ægis of experiment. By experiment let the truth be told. Let any twelve men in England devote twelve half hours each to experiment, *secundum artem*, and then relate the issue.

The books which give the best account of the present state of mesmerism are, "*Histoire critique du Magnetisme Animal*," by M. DELEUZE; "*Instructions pratiques sur le Magnetisme Animal*," by the same; "*Traité du Somnambulisme*," by BERTRAND; "*Exposées des Cures operées en France par le Magnetisme Animal depuis Mesmer jusqu'à nos jours*," 2 vols.; "*Annales du Magnetism*;" "*Bibliothèque Magnetique*;" "*L'Hermes*," and "*Le Propagateur*," two periodical journals, exclusively destined to mesmerism. The fifteen volumes of cases published in Berlin, and in German, are the richest collection of mesmeric transactions existing. The works of HUFELAND, KIESER, WOLFART, &c. are also of the highest value.

OIL OF TURPENTINE AND MERCURY.

Hints on the associated Use of Oil of Turpentine and Mercury.

By JOHN WILSON, M.D. R.N. (Communicated by Dr. WM. BURNETT.)

AT page 37 of the "*Memoirs of West Indian Fever*," there is the following passage: "Like mercury, turpentine excites the vascular system primarily, and increases secretion secondarily, though not so steadily or powerfully; it acts, however, more suddenly, and it appears to dispose the body to be more readily impressed by mercury."

I now propose to detail a few cases in confirmation of the opinion expressed in the latter part of the preceding sentence, and to make some cursory remarks on the therapeutic agency of calomel and oil of turpentine in combination; in which I shall endeavour to show that the latter, under proper management, accelerates the action and increases the curative power of the former. When I speak of accelerating the action and increasing the curative power of mercury, I do not, of course, refer exclusively, or even principally, to one of the chief signs of that action, namely, ptyalism; but to excitement of the general capillary system, whether secreting or unsecreting, in which I believe

its remedial power, at least in febrile disease, mainly to consist. Whether turpentine, when combined with calomel, possesses any influence beyond accelerating the action and increasing the power of mercury as a mercurial, is difficult to determine; but I am disposed to think that in certain cases it has a specific power of its own, increased by being associated with the specific power of mercury. To make my meaning more clear, I believe that the combination in question, like compound purgatives, has greater effect than the effects of the individual remedies taken together; and that the turpentine, in such cases, does not act simply as a non-cathartic stimulant given with a purge, which accelerates the action and increases the power of the purgative medicine, insomuch as it excites the lining membrane of the intestine, thereby alone quickening the purgative action and rendering it greater; but that it cooperates directly with the mercury in the remedial process, and contributes a part to the whole sanative effect.

Opium has generally been given with the calomel, but with the view chiefly of preventing its acting strongly on the mucous coat of the intestine: this it has generally accomplished, and in some instances has probably acted beneficially otherwise.

It often happens that, when we are anxious to excite the constitutional action of mercury, we find it difficult or unpracticable to do so, from the nature of the morbid action which we wish to subvert, or from some peculiarity in the organization of the patient, which, on the contrary, sometimes precipitates the mercurial action. The latter cause of difficulty is so inscrutable, that it may have led me to false conclusions in some of the cases in which I have used turpentine and calomel in combination; but, notwithstanding the deception to which that source of error may lead, I think myself justified in assuming that the conclusions which I have drawn are, upon the whole, just: and, if turpentine possess the power alleged, if it have simply the effect of accelerating mercurial action, it must be admitted to form a valuable auxiliary, at least, in combating some very serious forms of disease. In the graver forms of congestive fever, especially within the tropics, where we rest our principal hopes of success on mercurial action, and find ourselves baffled hour after hour in exciting that action, while we are persuaded that a few hours must seal the patient's fate, such an auxiliary would be hailed with feelings of gratification, known only to those who have been so circumstanced: those who, while giving dose after dose of

calomel, have watched for some sign of its action as a signal of safety, and have despaired of seeing it.

It may be thought that I should have waited for more certain proofs of my opinions before I submitted them to the profession, and so I once thought myself; but I have few opportunities of putting them to the test of further experience at present; and, as I deem them of some importance, I think it better to have them tried on a larger field than that of single observation, and therefore offer them, uncertain as they are, believing that, in all cases where it is proper to excite mercurial action, they may be tried at least with perfect safety.

The turpentine is given in different doses in different cases; so managed, however, as not to act sensibly on the intestines, and not to produce more than a slight degree of strangury.

I shall only premise further that the cases which follow are of a chronic nature, though I see no reason to doubt but that similar results may be obtained in acute cases. I may add, indeed, that the practice was first suggested to me by a case of fever, where, after giving large doses of calomel without any perceptible effect, oil of turpentine was given as a purge, which was speedily followed by well-marked mercurial action, and eventual recovery in very hopeless circumstances.

CASE I.—John Cooper, aged forty, boatswain's mate, 23d May, 1826, (at Bermuda.) Complains of headach, pain in the right side, shoulders, and back; the pulse is not much accelerated, and is of good strength; tongue white and moist; constipation, and want of appetite.—To take a purgative bolus of calomel and jalap.

24th.—Headach relieved, and there is less pain, excepting in the right hypochondrium and epigastric region. Medicine has acted fully. General appearance as yesterday. On examining the right hypochondrium, the liver is found considerably enlarged and hardened, and he complains of increased pain on handling. Says that he has suffered from the same complaint before.—V.S. ad $\frac{3}{4}$ xx. followed by faintness and vomiting.

25th.—Complaint of side little changed, and he has considerable dyspnœa, without cough. Had a bad night, with startings and sense of impending suffocation, which forced him to sit up in bed. There is little change otherwise in the symptoms.—A large blister, embracing the right hypochondrium and part of the chest applied.

26th.—Blister has acted well, and he expresses himself as considerably relieved. There is not so much dyspnœa, and the sense of suffocation is less distressing: there is still, however, fixed pain

in the hypochondrium, extending to the scapula, and impeding respiration; tongue clean; bowels open; little thirst, no appetite; skin natural.—*Capiat mane Ol. Terebinth. ʒij., et vespere Subm. Hydrarg. gr. ij. in pil.*

27th.—Report nearly as yesterday. Blistered surface discharging freely.—Let the turpentine be repeated in the morning, and the calomel pill in the evening, as yesterday.

28th.—Says that he is better, that he has slept well, and breathes more freely. Bowels open, with frequent micturition. Some return of appetite. Blistered surface nearly dried up.—Turpentine and calomel to be repeated as before.

29th.—Signs of mercurial action: gums swelled, and increased secretion of saliva. Continues to improve.

30th.—Considerable flow of saliva; and there is no complaint except a sense of confinement in the right side on deep inspiration, and that is much less than it was. From this date till the 8th of May he mended progressively, when he returned to duty free from complaint.

CASE II.—James Whitehead, aged thirty-two years, (February 7th, 1827, at Port Royal,) was discharged to duty on the 18th of January, cured of tertian intermittent, which went off under the use of cinchona and bitters in large doses. To day he has had two smart attacks of periodic fever, one in the fore and the other in the afternoon, each paroxysm having lasted about three hours. At present free from fever.—A full dose of calomel and jalap.

8th.—Has continued free from fever, but complains of a good deal of pain in the shoulders and hypochondrium, with sense of weariness and weight about the shoulders. Has been frequently and fully purged in the night.

9th.—Had a slight attack yesterday forenoon, the three stages being passed through in two hours. Complains of hypochondria, and shoulders.—No medicine.

10th.—Has had two distinct paroxysms today, similar to those of the 7th, and one yesterday, but is at present free from fever. Complains of weakness, pain in the sides, with slight cough, and sense of weariness. The countenance is sallow. There is tenderness in the hypochondriac and epigastric regions. He has not been exposed again, so far as is known, to the cause of intermittent fever: it is therefore probable that the recurrence of the complaint depends on visceral obstruction, especially of the liver.—*Submuriat. Hydrarg. gr. iv., Opii gr. i. fiat pil., to be taken at bedtime.*

11th.—Much as last night.—To take two drachms of oil of turpentine in mucilage, and the calomel and opium pill to be taken again in the evening.

12th.—Has had no return of fever. Gums swollen and tender, breath has the mercurial fetor.—Turpentine in the morning, and bolus in the evening, as yesterday.

13th.—Copious salivation.—No medicine, excepting a dose of salts, and an astringent gargle.

15th.—No return of fever. Cough, complaint of hypochondria, and shoulders, gone. Copious salivation still.

18th.—Free from complaint. Duty.

CASE III.—In the following case turpentine was not given with the calomel: it is introduced for the purpose of comparing it with the next in subsequent order, in which calomel was associated with turpentine, and showing the advantage of the combination.

John Sheppard, aged thirty, (30th March, 1826, at Bermuda,) is affected similarly to John Grave,* (whose case is detailed at page 9 of the Journal;) but in this case the symptoms of neuralgia are more severe than in the former. The pain comes on in an instant, and in an instant the eye becomes inflamed, and the tears run down the cheek. Independent of his own account, it is obvious that his suffering is very severe. It is referred to the notch or hole through which the frontal twig of the ophthalmic branch of the fifth pair of nerves passes from the orbit to the forehead; and from that point exactly he describes the pain as shooting up, and ramifying over the forehead; sometimes it darts around the ridge forming the edge of the orbit. It is most acute from seven o'clock till twelve in the forenoon, but returns occasionally at irregular periods. The circulation, digestion, and other functions, are not perceptibly affected. After free purging, he was ordered, on the evening of the second day, as in the case of Grane, Submuriat. Hydrarg., Pulv. Antimon., āā gr. x.; Opii gr. x. M.

April 2d.—The pain is less acute than yesterday. Medicine repeated.

3d.—Pain as yesterday. Medicine repeated as yesterday and the day before.

4th.—Pain much less acute. Medicine repeated.

5th.—Little pain left, but he complains of numbness in the parts affected. Medicine continued.

6th.—Report as yesterday. Medicine as before. It deserves remark, that there is neither constipation nor gastric derangement of any kind; no appearance of salivation.

7th.—No complaint. Omit the medicine.

8th.—Disease does not threaten to return. Discharged to duty.

CASE IV.—John Sheppard (21st of January, 1827, at sea,) has continued free from complaint since the 8th of April, 1826, when he was cured of neuralgia: it has now, however, returned, affecting the same place in the same manner, though not quite so severely as before.—To take an ipecacuan emetic.

* I regret that I have mislaid the notes of this case.

22d.—No change. A full dose of calomel and jalap; to be followed by salts and senna, if necessary to effective purging.

23d.—The bowels have been thoroughly emptied; and the pulse, tongue, and skin give no indication of disease, but the complaint in the orbit and forehead remain unchanged. No medicine.

24th.—Report as yesterday. In the evening to take the following bolus: Submuriat. Hydrarg. gr. v., Opii gr. i. M.

25th.—Little change since yesterday. Bolus to be repeated in the evening.

26th.—Says the pain is less acute. To take two drachms of oil of turpentine in mucilage now, and the bolus at night.

27th.—Has had very little pain since yesterday. Gums swollen, pulse accelerated; skin rather hot; some heat of urine. Turpentine as yesterday.—Evening: Copious salivation; pain gone. No medicine.

28th.—Continues free from complaint, except of his mouth, which is very sore, with abundant discharge of saliva. No medicine.

31st.—The salivation continues copious. No return of the original complaint; general headach. A saline purge.

February 1st.—Headach removed. Report in other respects as before.

4th.—Salivary discharge more moderate. No complaint.

7th.—Mouth well. No return of the neuralgic pain; no complaint. Discharged to duty.

In this case, when twenty grains of calomel were taken, abundant salivation ensued: in the former case, sixty grains were taken without inducing ptyalism. The two cases occurred in the same person, and as nearly as possible in the same circumstances: the same disease, the same mode of life, and apparently the same general condition of the body. There may have been some imperceptible or unperceived agency acting on the system, which rendered it less susceptible of the mercurial action at one period, and more susceptible at the other; but I think no closer evidence can be obtained in such cases, and it appears fair to infer, in the last, that the turpentine accelerated the action and increased the power of the mercury.

CASE V.—Anne Charles, (6th May, 1828,) the mother of many children, and fifty years of age, presents the following symptoms: Extreme emaciation and weakness; pulse hurried, weak and irregular, occasionally intermittent; tongue florid, shining, and smooth; skin hard, dry, and cold, especially on the lower extremities, though she complains at times of deep-seated, burning heat; tenderness in epigastrio on pressure; no appetite; bowels irregular, on the whole costive, with ill-conditioned discharges;

subject, during the last month, to fainting fits, with slight convulsive movements of the limbs; there is deep-seated pain about the sacrum and hips, darting down the back of the thighs, so severe as almost entirely to prevent sleep, and force her to scream. From these pains she is never free entirely, but they are much more acute at one time than another, and most distressing on alternate days. She has been ill about six months, and from herself and occasional medical attendant I gathered the following particulars: She was first affected with symptoms of catarrhal fever, for which she was bled, and took the usual remedies, till the acute symptoms gave way. Instead of recovering strength, however, she continued poorly, with flying pains, which at length fixed where they now are: she had little appetite; was distressed with flatulence and other hysteric symptoms; could not sleep, and continued to waste. She took aperients, cordials, and bitters, then diaphoretics; employed frictions and blisters; and had, on one occasion, taken daily, for a fortnight, a pill containing, besides compound colocynth extract and rhubarb, a grain and a half of calomel. In spite of every thing, she continued getting worse till the 6th of May, when I found her in the condition already stated; a condition so unpromising, that I had little hope from treatment of any kind.

What had been done appeared judicious, though ineffective; and what to attempt further, I was at a loss to determine. In what way the pains of the limbs, of which she now alone complained, were connected with the gastric affection? and what that gastric affection was? I did not know. But one thing pressed itself strongly on the attention, namely, the dry, cold, inanimate state of the surface, especially in the lower extremities, showing the want of adequate circulation there, and the probability of dangerous, deep-seated congestion. This state I determined to make my chief practical guide, and accordingly (hot baths could not be obtained,) ordered a pill, consisting of ten grains of calomel and a grain and a half of opium, at night; and, the following morning, two drachms of oil of turpentine in mucilage; with an occasional draught, containing carbonate of ammonia and compound tincture of cinnamon.

It would be tedious to give daily details of the symptoms, and I shall therefore only state that, when she had taken five pills and as many of the turpentine draughts, a most unexpected and gratifying change appeared: the pains were much abated, the surface was warm and soft, the appetite considerable, the pulse of good strength; and the gums were tumid and tender, without salivation. The tongue was white, but not loaded; the bowels acted regularly, and she menstruated. There being then some heat of urine, the turpentine was omitted for a day, the pill being continued.

When she had taken the medicines eleven days, the mouth being sore, she objected to taking more; which, as the disease seemed

to be removed, were not urged upon her. She then took considerable doses of the sulphate of quinine for ten days; and, three months after the commencement of the course, she walked twelve miles in a day, to visit a daughter.

The foregoing cases are introduced principally for the purpose of showing that oil of turpentine accelerates the action and increases the power of mercury as a mercurial; but I think they besides furnish hints, and point to conclusions of a different, though not less interesting, nature, as I have before suggested. It would lead me beyond the limits of a paper like this, to comment on each of them; but I beg to offer a remark or two on the cases of John Sheppard and Anne Charles, all of them, I believe, certainly the two first, instances of neuralgic disease; and I regret that I have mislaid the notes of two other cases of similar import.

In the case of Anne Charles, calomel had been given, in combination with aperients, to a large amount; then it was afterwards given with turpentine. In the first instance it had no sensible, at any rate it had no beneficial, effect. There was no perceptible difference in the condition of the patient, except the difference produced by the uninterrupted progress of the disease. It appears, therefore, fair to conclude that the turpentine did more than dispose the body for the speedy action of the mercury; that it cooperated essentially with it, that it contributed a constituent, though unknown, part to the curative effect.

In the cases of John Sheppard, it is true, the disease yielded under the use of mercury, without being associated with turpentine, in the first instance; and perhaps nothing more can properly be deduced from them, than that the operation of the one was quickened by that of the other. It is to be observed, however, that, after the cure effected under the mercury without turpentine, the disease returned at the end of eight months; whereas, when I last saw the subject, twenty months had elapsed without any return of symptoms.

There is little affinity between the following case and any of the preceding ones: its history is unsatisfactory and its nature obscure, and I am not satisfied regarding the part which turpentine acted in its cure; yet I am tempted to insert it, because it is, in some respects, uncommon and interesting.

John Shaw, aged twenty-four, (7th November, 1826, at Port Royal,) complained three days ago of headach, for which he was purged; says that there is severe pain both in the occiput and sinuipat, though there is no appearance of disease, the pulse,

tongue, and skin appearing healthy.—A dose of calomel and jalap.

8th.—Says he is no better: the breath is offensive, and there are other appearances of diseased digestion. An emetic given.

9th.—Still complains as before, the general appearance being as before. V.S. ad $\frac{3}{4}$ xx., which induced faintness, &c. To take a full dose of calomel and jalap.—Evening: There being no change, a blister was applied to the nape of the neck.

10th.—Says that the pain in the hind head is gone, but that the forehead continues as it was, and that the pain now affects the eyeballs and sockets. The bowels have not been satisfactorily purged. To take a draught of salts and senna every two hours, till there be full catharsis.

11th.—The bowels are now thoroughly emptied, and he says he is much better.

12th.—Continues better: walks about, and takes food.

13th.—Report as yesterday.

14th.—Complains again of pain across the forehead and affecting the eyes. The left temple to be cupped and scarified.

15th.—No change. A blister to the temples. There is still no apparent constitutional derangement.

17th.—He became delirious in the night, and refused to stay in bed; and in the morning was partially comatose, being roused with difficulty, and answering questions indistinctly. Pulse fifty-eight, of moderate strength; skin cooler than natural; tendency to coldness in the extremities. Head shaved, and the scalp covered with a blister. To take a scruple of calomel.—Evening: No change. Calomel repeated in scruple dose.

18th.—Pulse has risen to seventy, and acquired strength; skin warmer; he is more easily roused, but there is still comatose tendency. Calomel repeated.—Noon: a drachm of oil of turpentine.—Evening: The blister has acted pretty well. Calomel repeated.

19th.—Frequent and tolerably abundant discharges of urine, and he appears rather better. Calomel as before.—Noon: half an ounce of oil of turpentine.—Evening: calomel repeated.

20th.—Little change since last night. Urine, which is tinged with blood, passed frequently and unconsciously; numerous stools; gums tumid and tender. Calomel repeated.

In the afternoon, having returned to Port Royal, he was sent to hospital, passing urine and feces unconsciously, and appearing to labour under hopeless oppression of the brain. That the brain was oppressed to a certain extent, can scarcely be doubted; but it is now pretty clear that the oppression consisted in vascular congestion merely; for, soon after going to the hospital, on the breaking out of a copious salivation, the alarming symptoms suddenly disappeared: he became sensible; natural appetite, and the other functions of health were restored; and in a fortnight afterwards he returned to duty.

In this case, it will be admitted that life was in danger; and it will also be admitted, I think, that it was saved through the twofold agency of excitement being communicated to the vascular tissue, and the consequent evacuation. It may not be admitted that the means employed were the most appropriate; but, whether that be admitted or denied, the mercury was the direct agent, acting in its twofold capacity, of the patient's recovery. In what manner or measure the oil of turpentine contributed to the successful issue, is uncertain, but I think it did contribute. When calomel had been given in large quantity without any perceptible effect, and when, from the impaired condition of the nervous organs, and general torpor, it was doubtful whether it entered the system, the turpentine was soon found to have mingled with the blood, and acted on the secernants. Having done so, may it not be supposed to have excited the absorbents to take up, and the blood-vessels to move the calomel onwards. If it did so, it would clearly be of great importance in a case like this.

It is in such cases of acute disease that turpentine promises to be a valuable auxiliary to the curative means now in use, which are too often inadequate under the best management, and therefore want the aid of others. In deep and dangerous congestion, affecting organs immediately necessary to life, arising from a state of the cerebral system little understood, could we be assured of the specific action of mercury, we should be less apprehensive of the issue: hence any thing which had the power of precipitating that action would be an important acquisition. In febrile disease, it is to such cases that turpentine should be chiefly applied; and to such cases, indeed, I believe it ought to be limited. It ought not to be administered where there is general inflammatory action, unless it be given as a purgative remedy, and then it does not appear to be an appropriate purge. Like calomel, it ought to be given when there is diminution, not increase, of vascular action.

EAST-INDIAN OPIUM.

On East-Indian Opium. By JOHN WEBSTER, M.D. Physician to the St. George's and St. James's Dispensary, &c.

At a recent meeting of the Westminster Medical Society, specimens of East-Indian opium were exhibited to the members, superior, it is believed, to any which has hitherto been met with in this country; but, as it was almost impossible, at a public meeting, to give a full or accurate

description of so valuable a drug, more especially as the hour for adjourning the Society had nearly elapsed, the following additional observations are subjoined; which, although brief, may not be altogether uninteresting. Should they tend to direct the attention of medical men to further and more particular investigation, it will be gratifying, and must also prove very beneficial both in a commercial and scientific point of view, could the supply of opium for the home, and it may be said for the European market, always be obtained from a country whose prosperity is so intimately connected with England as the East Indies undoubtedly is; for surely every one must allow that such commercial transactions would be far preferable to continuing, as at present, dependent for this indispensable medicine upon the good will of a nation like the Turkish, who, although considered as "an ancient ally," have, however, never been celebrated for liberality towards this or any other Christian nation.

I lately received a specimen of East-Indian opium from my friend, Dr. ADAM, secretary to the Medical Board at Calcutta, along with a letter containing the following account:

"I embrace the opportunity of my friend, Mr. ———, proceeding to England, to send you a sample of very pure opium, prepared for medicinal purposes under the direction of our Board, and which I should hope will be found superior to any Turkish in the home market. I am disposed to think that such a preparation as this, sent home in fixed quantities, and bearing the stamp of the Honourable Company as a voucher for its purity, would soon come into general use, and supersede all other varieties of the drug met with. Captain Jeremie, who manufactures it, is an assistant to the opium agents, and has already done much to improve the quality of the opium generally prepared in the Bihar division. He very ingeniously has contrived many modes of packing; but this, in plates of mica, and placed in a strong teakwood box, appears to me preferable to all others."

In compliance with the request of Dr. Adam, and being also anxious to ascertain, from personal experience, the strength and properties of an opium so much recommended, many trials have been made, particularly at the St. George's and St. James's Dispensary, as also by several medical practitioners, to whom portions of the drug had been furnished; and, whether given in substance or in the form of tincture, it appeared to be quite equal to any Turkey

opium. One gentleman, indeed, considered it superior, in so far that those unpleasant feelings in the head did not so frequently follow its exhibition as after opium of the ordinary kind. From repeated observations, it is therefore considered that this variety of opium may advantageously be substituted for the Turkish, especially since it was stated at the Westminster Medical Society, that the home market may be supplied with East-Indian opium on much lower terms than with the other. Should subsequent experience, therefore, confirm what is now advanced, there can be little doubt but it will ultimately come into general use.

In appearance, this East-Indian opium very much resembles socotorine aloes, both in weight and texture, being only a little darker in the colour and with a slight tinge of red: it is consequently very unlike any of the same medicine hitherto imported, which has usually been of the consistence of common tar, and of not more than half the strength of that brought from the Levant. In taste and smell it is very similar to the Turkish, though perhaps not quite so powerful, excepting when heated. If made into tincture, the preparation is of a beautiful dark colour, and perfectly clear; and, as almost no residuum remains in the vessel in which it is made, scarcely any loss, either of the spirit or the opium, is sustained; which, it is well known, forms a very considerable objection, in point of expense, to the tincture usually employed.

As it has generally been supposed that the efficacy of opium especially depends upon the quantity of morphia it contains, portions of the East-Indian variety were subjected to analyzation, in order to ascertain the proportion of that, as well as of the other ingredients; and Dr. WM. GREGORY, assistant to Dr. TURNER, professor of chemistry in the University of London, having kindly undertaken the task, the following statement has been drawn up, as the result of his investigation:

“The specimen of East-Indian opium which you gave me weighed about four hundred grains, after being dried at a gentle heat. From this quantity I obtained fifteen grains of morphia; somewhat coloured, but quite crystalline. Operating on so small a quantity, however, it is impossible to avoid considerable loss; nor could I ascertain the amount of any of the other ingredients. The opium is quite free from extraneous matter: it does not, however, seem to contain less colouring or extractive matters than Turkish opium. It appears to me to contain also narcotine; but, without a separate process, this substance, the quantity of which is small, is with difficulty extracted. The morphia is, as in com-

mon opium, combined with meconic acid, which was easily detected by its power of reddening the solutions of peroxide of iron. I should think the quantity of morphia as great as in good Turkish opium, if not greater; that is, about five drachms in the pound of opium; but I do not see any reason for supposing the opium to be more efficacious in practice. If it can be brought into the market at a cheaper rate, it will probably supplant the present kinds, especially from its being so clean and free from adulteration."

"To Dr. Webster."

Dr. A. T. THOMSON, professor of materia medica in the University of London, also most kindly volunteered to analyze a portion of the East-Indian opium; and, although the result shows a smaller proportion of morphia than Dr. W. Gregory obtained, it is still highly important and satisfactory. The following is Dr. Thomson's letter:

"The specimen of East-Indian opium which you gave me possesses many advantages over all the other specimens of that variety of opium that have come under my observation: it is cleaner, has a higher narcotic odour, and is more soluble in water at the temperature of 60° Fahrenheit than the ordinary Indian opium. One disadvantage, at least as far as relates to its analysis, or as forming a source of the salts of morphia, is the large quantity of colouring matter which it contains. It was submitted to the following analysis: Four hundred and eighty grains were rubbed up with three pints of distilled water, and macerated for twenty-four hours; the solution was then filtered, and the meconiate of morphia contained in it decomposed by ammonia, which threw down the morphia, in combination with the colouring and some gelatinous matter. This precipitate, well washed, was mixed with a few ounces of distilled water, and converted into an acetate by the addition of pure acetic acid; it was next freed from the colouring matter, by mixing it with animal charcoal deprived of its salts; and, the solution being filtered, was again decomposed by ammonia, added in excess. The morphia thus precipitated was first washed with weak spirit, in order to free it as completely as possible from colouring matter, and then treated with strong boiling alcohol. I send you the result. The crystals are not so white as they would be, were they dissolved again and recrystallized; but I was anxious to lose as little of the product as possible. I have not weighed the salt; and, in leaving this to you, I think you may allow three or four grains for loss.

"I am of opinion that opium, prepared in India with the care that has evidently been bestowed upon this specimen, cannot fail to find a ready market in Europe. It is not likely to surpass the opium prepared in Persia, the Turkish opium of the European market; but, if it never can attain to the same degree of excellence,

on account of climate, still it will be a valuable article, if it come near it in quality."

"To Dr. Webster."

The quantity of morphia obtained by the above process from the 480 grains of opium weighed exactly six grains, to which are to be added four grains for loss; thus being about one third less than the product obtained by the other analysis.

As it is proposed still further to investigate the nature and properties of East-Indian opium, more especially in reference to its utility as a remedy in the cure of disease, another report may perhaps be given, should any facts worth communicating present themselves.

56, Grosvenor street; 11th May, 1829.

HOSPITAL REPORTS,

(Principally condensed from various Periodical Publications.)

ABSCESS OF THE LARYNX.

Abscess of the Larynx. Sudden and unexpected Death. Dissection.
(HÔPITAL DE LA CHARITÉ.)

A ROBUST man, a cartwright by trade, æt. twenty-eight, had felt indisposed for some days. He had lost his appetite, and had had pains in his limbs. Admitted April 8th, 1829. His face was of a yellowish cast, particularly around the nose and lips. Dull countenance. Vomiting. Pulse quicker than natural.

M. CAYOL could detect no local disease, and for two days the case was left to nature. As the patient now was much oppressed, two grains of emetic tartar were given. Bilious vomiting followed. Continued better until the 17th. At this time an attack of fever occurred, and the feelings of general uneasiness were increased. The patient had a very unfavorable appearance. Bleeding from the nose, but no alleviation of the symptoms. A troublesome cough soon came on, attended by difficult respiration and sanguineous expectoration. The stethoscope was applied, but only the mucous rattle was detected. The students had observed some attacks threatening suffocation.

18th.—An aphthous appearance on the left tonsil; redness of the palate; great depression and difficulty of swallowing, even the saliva.

19th.—Difficulty of breathing increased. M. Cayol, with the view of remedying pulmonary catarrh, ordered two ipecacuan emetics.

20th.—Had vomited. Bowels freely open. Appears very easy.

He rose up suddenly, placed his hand upon the sternum, and cried out that he should be suffocated. M. MIGUEL immediately attended, and found the patient in a state of asphyxia. He prepared to bleed him, but he died instantly. Five minutes before, he had conversed without difficulty with the nurse.

Dissection, twenty-two hours post mortem.—No appearances were detected in the brain, thoracic or abdominal viscera, which could be connected with the symptoms that had existed. The tongue was very thick, particularly towards its base. The mucous membrane of the pharynx and palate was very red; and the membrane covering the epiglottis, the ligaments, and the entrance of the larynx, were also red and thickened. This redness did not pass beyond the lips of the glottis. The edges of the epiglottis were swollen. There was an aphthous appearance on the left tonsil, and upon the epiglottis a membranous secretion, which closely adhered to the mucous membrane, and resembled that which is found upon the tonsils at the commencement of the disease which has been described by M. BRETONNEAU under the name of *diphtherite*. But the most remarkable morbid appearance was the following: There was a partial destruction of, and an aperture in, the mucous membrane a little on the outside of the aryæno-epiglottic ligament. Purulent serum was discharged from the aperture, upon pressure. Upon enlarging this opening, a collection of matter was discovered around the base of the tongue. The subcutaneous cellular tissue which covers the epiglottis and glottis was thickened, and full of serum. It did not contain any pus.*

ISCHURIA.

A singular Case of Ischuria. By CHARLES HASTINGS, M.D.
(WORCESTER INFIRMARY.)

ON the 9th of April, 1814, M. H., aged twenty-three, was admitted an in-patient of the Worcester Infirmary. She represented herself as having been particularly healthy. Within the last week she had been exposed to cold, whilst the catamenia were flowing abundantly. For the first day or two, she only appeared to suffer from feverish symptoms: soon afterwards, however, the secretion of urine became very deficient, and she had difficulty in passing it.

On the evening of her admission she became much worse, and complained especially of pain and tenderness over the whole of the lower part of the abdomen, and in the loins. There was vomiting, and a disposition to convulsion. The lower part of the abdomen was much distended. The catheter was introduced, and ten ounces of urine were drawn off; after which, the pain was relieved. She was ordered to take a scruple of cathartic extrac

* *La Lancette Française.*

immediately; and one drachm of sulphate of magnesia, dissolved in camphor mixture, three times a day.

The next morning, the bowels had not been moved. She was afflicted with severe headach, as well as the abdominal pains. She had passed no water, and was delirious during the night.

She was cupped on the back, and had a blister applied, and took cathartic mixture every four hours till the bowels moved freely; after which she went into a warm bath.

The symptoms remained for several days very much in the same state. Delirium usually came on during the night. No urine was passed by the natural effort, but about three ounces were drawn off by the catheter in the course of twenty-four hours. She very frequently vomited, and suffered much from pain, tenderness, and tension of the lower part of the abdomen.

On the evening of the 17th, insensibility came on, for which a blister was applied to the back of the neck; the pulse was sixty. An active aperient was given.

On the 19th, no improvement had taken place, for the vomiting was incessant, and the pain in the abdomen and back was more severe. Pulse eighty. She was bled three days in succession, with some alleviation of the pain, but the abdomen became generally enlarged and very tender; there also ceased to be any urine drawn from the bladder by the catheter. This continued to be the case for five days. The bowels were open. She took saline diuretics without avail.

On the 25th, there was much vomiting, pain, and distention of the abdomen; but she passed a little urine. Pulse eighty. She was bled to eight ounces.

On the 27th, a bloody discharge appeared at the umbilicus, after which the abdominal pain and tension were relieved. She also passed some urine by the urethra. The vomiting was, however, worse than it had previously been.

The bloody discharge from the umbilicus, and the other symptoms, continued very much the same till the 2d of May, when there was a discharge of a urinous appearance and smell from the umbilicus. She had passed no urine by the urethra for three days. The head was very painful, the pupils dilated; pulse fifty-six; bowels costive. Some leeches were applied to the temples, and a blister to the back of the neck; a brisk purge was administered. The catheter was introduced, but no urine found in the bladder.

This discharge of urine from the umbilicus continued till the 5th, when the catamenia appeared, but quickly vanished. The abdomen became less tense and tender; there was not so much vomiting; the bowels were open.

From the 7th to the 9th, there was no discharge of urine from the umbilicus, nor was there any passed by the urethra: as a consequence, the abdomen became much distended, and severe pain

followed, with vomiting. The tension was most remarkable at the umbilicus, forming a circumscribed tumor.

On the 10th, in the morning, six ounces of urine were drawn off by the catheter; and, in an hour after, two quarts of urine, of the same appearance, gushed from the umbilicus. This was followed by much relief of the abdominal pains. The discharge of urine from the umbilicus continued for three days, and was accompanied with great improvement of the general symptoms.

The amendment, however, did not last; for the discharge from the umbilicus again ceased, and for three days the vomiting, the headach, the abdominal tension and pain, returned with their former severity.

On the 17th, the catheter was introduced into the bladder, and no urine was found. In an hour after this, two quarts of urine passed from the umbilicus, and soon afterwards great relief was experienced.

From this time to the 25th, there was little variation; but the young woman suffered during that interval very much from vomiting, and daily passed urine from the umbilicus. The catheter was passed every day, and no urine was found, but the bladder contracted strongly on the instrument; sometimes, immediately after the catheter was removed, a discharge of urine would take place by the umbilicus, and once as much as three quarts were thus passed.

On the 26th, for the first time after many days, four ounces of urine were drawn from the bladder. Each succeeding day this quantity was now increased, and the quantity passed by the umbilicus was diminished. There was also a general improvement of the symptoms, with the exception of vomiting: this continued obstinate. All this time the medicine that she took was confined chiefly to the class of purgatives; blisters were also applied to the neck and epigastrium.

The bladder was regularly emptied every day by the catheter for more than a month after this date, during which time the abdominal pain and vomiting subsided, and there was no discharge from the umbilicus. Early in July she began to pass some urine, and the power over the bladder was gradually restored. She was discharged in the middle of July in tolerable health, but still often complained of pain in the pelvic region. She menstruated.

Observations.—This curious case of ischuria is well worthy of consideration. The remarkable sympathy observable between the brain, the stomach, and kidneys, is common to all cases of this description, and is so obvious as not to require any further comment.

The very remarkable feature in the case is the occurrence of the urinary discharge from the umbilicus many days after the ischuria had been noticed. Such instances, although rare, are not without parallel in the annals of medicine. SCHENCK relates two instances of this kind. In the one, a male, the urine was discharged in

consequence of an obstruction at the neck of the bladder, "*tanquam mictione ex umbilico*," for many months, without any detriment to health. In the other, a female, and more resembling the one now related, "*cum suppressa per multas dies fuisset urina, tandem per umbilicum urinam profudit*."—Schenck, *Obs. lib. iii. de Urina*, p. 489.

The interesting question is to determine in what manner the urine is conveyed to the umbilicus in these instances. The urachus offers itself as a mean by which the discharge may be determined to that part, and it seems probable that, in the case of mechanical obstruction related by Schenck at the neck of the bladder, that a channel of communication was formed by the urachus, between the bladder and the umbilicus. But, in the case we now remark upon, there had been no urine secreted into the bladder long before its appearance at the umbilicus, nor was there for some time after; and the first discharge from the umbilicus was not of an urinary but bloody nature. We must consequently, I think, regard the urinary discharge in this instance as vicarious, and as proceeding probably from the peritoneal surface. This view seems confirmed by the great abdominal distention which took place for some time previous to the discharge from the umbilicus, when it was invariably found, from introducing the catheter, that the bladder was empty, and that it contracted on the instrument.

Some cases of this description have been placed upon record by eminent men worthy of great credit. There is none, perhaps, more deserving of attention than that by PLATERUS, which is thus related by the renowned SENNERTUS: "*Puellæ cuidam annos natæ tredecim, cū aliquando copiosè minxisset, urinam subito suppressam esse, atque tunc aquam serosam ex aure dextra adeo affatim cœpisset effluere, ut una vice mensuræ duæ scœpe emanarint, idque dies aliquot*." He then adds, that, on diuretics being administered, the urine was passed freely from the bladder, and the discharge from the ear ceased; but, as soon as the diuretics were discontinued, the discharge again took place from the ear, but was altogether removed by general terebinthinate remedies, and local repellents to the ear. The health did not suffer.—Sennerti Opera, lib. iii. p. 8, § ii. cap. ix.

In our case it was evident that much inflammatory action was going on in the pelvic viscera, previous to and during the discharge of urine from the umbilicus; and there was a considerable sympathy of the general health with the local inflammatory action.

I may further add, as a notice to this case, that the young woman was again admitted into the Infirmary in May, 1827, for paralysis of the lower extremities, from which she recovered by appropriate remedies. The urine for a time was drawn off by the catheter, but there was no return of the former disease.*

* Midland Med. and Surg. Reporter, May 1829.

CALCULI.

Calculi removed from the Bladder by the Urethral Forceps; Death.
(GUY'S HOSPITAL.)

J. MONEY, aged sixty, admitted December 24th, 1828. He states that eight years ago he began to void with his urine a deposit of fine sandy matter: the particles forming this deposit gradually became larger, until at length the constant discharge of sand was succeeded by the occasional escape of small calculi, which varied in size from that of a barleycorn to a large pea. During the last twelve months no calculi have been discharged; at the same time the sufferings of the patient, from distinct symptoms of stone in the bladder, have become very severe. The only common symptom absent in this case is the abrupt stop to the stream of urine during its discharge.

On sounding the patient soon after admission, Mr. KEY ascertained that the symptoms depended on numerous calculi, rather small in size: he thought the bladder might contain twelve or fifteen of them, and that their size probably admitted of removal by the urethra, which was the more desirable as the patient's ill state of health entirely forbade the operation of lithotomy. His appearance was that of a previously hale man, now suffering severely from disease: his system was feverish and irritable from constant pain, his breathing difficult, cough frequent, pulse irregular and intermitting; every slight cold excites disorder of the lungs, and occasionally he complains of pain in the region of the kidneys.

December 24.—R Liquoris Potassæ gt. xx.; Tinct. Hyoscyami gtt. xl.; Aquæ Menthæ ℥iss. Omni nocte sumend.

January 8.—An accession of fever, with aggravation of chest affection.—Pil. Colocynth. Calomelanos gr. x. statim.

Jan. 26th.—No material or permanent improvement.—R Potas. Carbonatis ℥ij.; Potas. Nitratis gr. x. bis in die sumend.—R Ext. Conii gr. v. omni nocte sumend.

The above and similar treatment was pursued until March 9th, with more or less relief to the urgency of his symptoms.

March 9th.—He suffers much less pain, and his system generally is in a more tranquil condition, but is not in a state to submit to the usual operation, with any hope of recovery. Mr. Key therefore determined to try what could be done in removing the calculi per urethram. The facility with which this, in the first attempt, was accomplished, and the very little pain it gave the patient, were very pleasing. The instrument, scarcely thicker than a good-sized sound, was introduced almost as readily as the sound generally is, and was as quickly withdrawn, with a stone in its grasp. This was done three times, with no other difficulty than that, in withdrawing one of the stones, it hung a little in the narrow part of the canal, close to the external orifice. Mr. Key did not introduce the forceps a fourth time, leaving the remaining calculi

to future attempts, that the amount of irritation might be divided. The stones were polished and angular, about the size of common plum stones, being larger than any the patient had previously voided. His gratitude on finding three of his tormentors removed with so little pain was very clearly expressed. In the afternoon a fourth calculus, nearly equal in size to the others, spontaneously came away with his urine. No constitutional irritation followed this operation, and up to March 28 the patient's health continued very nearly as before.

March 28th.—The forceps were again used. On this occasion the calculi were less readily grasped, and with more difficulty removed. Of one Mr. Key was compelled to relinquish his hold just anterior to the scrotum, but by external pressure he succeeded in forcing it along the urethra, and finally in expelling it. A second was removed also with difficulty, especially at the anterior contraction of the canal, where it long resisted both pressure from behind and the application of common forceps through the orifice. The removal of these two calculi having been attended by great pain and some bleeding from the urethra, further attempts were refrained from, and the patient put to bed.

30th.—Since the operation, the patient has suffered severe and almost constant pain in the urethra and neck of the bladder, it being especially acute whenever he voids urine. There is also considerable disturbance of the system: the pulse is quick and irregular, cough troublesome, breathing harassed, and general febrile symptoms.

April 6th.—The case becomes serious: the local pain increases, and is described by the patient as exactly resembling the sensation of a calculus lodging in the commencement of the urethra; but the introduction of a sound does not discover one. Urine very turbid, containing much mucus. The disturbance of the system is fully proportioned to the local suffering.

11th.—Alarming worse. Pain in the neck of the bladder and perineum is extreme; no tumor appears externally. The patient is fast wearing out; his countenance becomes sunken; pulse very quick and weak; mouth parched, tongue dry and brown; cough frequent and very distressing. The urine is exceedingly unhealthy, as if mingled with dark-coloured fetid pus.

12th.—This morning a most distressing attack of bilious vomiting supervened, with increasing weakness and exhaustion. Sir A. Cooper saw him today, and prescribed, but it was evidently in vain. The poor fellow expired the following day.

Inspectio cadaveris.—The bladder contained sixteen calculi, varying from the size of a horsebean to that of a large walnut. Its coats were thickened and contracted; the mucous membrane of a dark gray or ashy colour; and the fluid in the cavity was thick, dark-coloured, and offensive. The ureters were dilated to three or four times their natural caliber; their lining membrane, as well as that of the pelvis of the kidney, was softened, and had the same

ashy colour with the bladder: they also contained the same semi-purulent fluid. The membranous portion of the urethra, immediately behind the triangular ligament, was deeply discoloured, as if from slough or gangrene; and a very small opening was found leading from it to a cavity, apparently the collapsed cyst of an abscess, situated within the pelvis, between the bladder and rectum, rather to the right side: this contained a similar fluid to that found in the bladder, and its parietes were ragged and of the same dark ashy colour. The other viscera presented no recent or active disease: the lungs were nearly healthy, the heart above the natural size, the aorta dilated, and at some points having patches of ossification.*

CRITICAL ANALYSES.

*Quæ laudanda forent, et quæ culpanda, vicissim
illa, prima, cretâ; mox hæc, carbone, notamus.—PERSIUS.*

An Essay on the Use of the Nitrate of Silver, in the Cure of Inflammations, Wounds, and Ulcers. By JOHN HIGGINBOTTOM, Nottingham, Surgeon. *Second Edition, much enlarged and improved.*—8vo. pp. 204. Seeley and Burnside, London, 1829.

HAVING already noticed the first edition of Mr. HIGGINBOTTOM'S work, we did not, at first, think it would be necessary for us to do more than announce the receipt of the copy of the edition now before us. But, in examining it more fully, we are struck with the many and important additions which the author has continued to make to our knowledge of the use of the nitrate of silver. The external application of this substance is not only useful in the healing of various ulcers, but, what we did not previously imagine, in cases of external inflammation, of erysipelas, of bruised as well as punctured wounds, and of burns.

Mr. Higginbottom appears to have fairly established the utility of the nitrate of silver as a *new kind* of remedy in many surgical diseases. It appears directly to subdue the actions of the phlegmonous and the erysipelatous inflammation; and to change that of the suppurative, the sloughing, and the ulcerative, to the adhesive. The nitrate of silver, applied along the course of inflamed absorbents, directly subdues their morbid action, all tenderness promptly subsiding; applied lightly to burns, the inflammatory action characteristic of this accident is promptly exchanged

* Medical Gazette.

for one of a milder and less painful kind. We perfectly agree with the author, both from what we ourselves know and from the facts here laid before us, that the nitrate of silver has very improperly been denominated a caustic. Instead of destroying, as Mr. Higginbottom justly observes, it more frequently preserves parts which would inevitably slough but for the preservative powers of this remedy. We know no fact which better illustrates this property of the nitrate of silver, than that of its preventing the formation of pits from small-pox; an effect obviously depending upon the sloughing of minute portions of the subcutaneous cellular membrane. It is suggested in an early part of this volume, and the remark is repeated from the former edition, that the nitrate of silver may be useful in some cases of compound fracture, by affording an effectual means of closing the external wound, and excluding the atmospheric air. This object is certainly most highly important, and we think Mr. H.'s suggestion far more likely to succeed than that of Sir ASTLEY COOPER, of applying lint dipped in blood: the eschar is more tenaciously adherent; and the application of the nitrate of silver may induce a better, because a more adhesive, state of inflammation of the bruised parts, and even of the ends of the fractured bone.

But to proceed to a more regular analysis of this useful little work.

Some cases are given illustrative of the effect of the nitrate of silver in subduing the inflammation of phlegmon, or a line of inflamed absorbents; in arresting the spreading of erysipelas; and in preventing and modifying the formation of pus.

"It is frequently only necessary to convert the cuticle into an eschar over the inflamed surface. In other cases, the nitrate of silver must be applied more abundantly, so as to induce a degree of vesication. The part is first to be washed with soap and water, to remove any oily substance from the skin, and then it is to be wiped dry; the inflamed and surrounding skin is then to be moistened, and a long stick of nitrate of silver is to be passed over the moistened surface, taking care that not only every part of the inflamed skin be touched, but the surrounding healthy skin, to the extent of an inch or more beyond it, in severe cases. The nitrate of silver may be then passed over these surfaces once, twice, thrice, or more times, according to the degree of inflammation: once in slight cases, twice or thrice in common cases, and more frequently if quick vesication be required. It is necessary to apply the nitrate of silver more freely on the hand or sole of the foot, where

the cuticle is thick, than on other parts. After the application, the part is to be exposed to the air to dry, and is to be kept cool."

Mr. Higginbottom observes, "that whenever an eschar made over a wound or ulcer can be preserved adherent, such wound or ulcer infallibly heals;" and he goes on to describe shortly the immediate effects of the nitrate of silver applied to such parts. In order to form this adherent eschar, several things should be particularly attended to: first, the application of the nitrate of silver should be made not only over the whole surface of the wound, but also upon the surrounding skin. 2d. It should be applied lightly over the wound, so as to touch every part of it; and, if the surrounding skin be inflamed, it should be moistened with a little water, and the nitrate of silver passed once lightly over it. 3d. Every thing must be avoided which might detach it, but, as it separates from the healed edges of the wound, it should be carefully removed by a pair of scissors. To preserve the eschar adherent still more effectually, it is advised that a small portion of gold-beaters' skin be applied over it, which can be removed by wetting it with a little water, when it becomes necessary to let out any matter which may have formed under the eschar. Mr. H. here draws a comparison between the mode of healing by eschar and that by scabbing, and plainly shows that the former is to be preferred.

We will begin our observations with phlegmonous inflammation; and here let it be observed, that Mr. Higginbottom generally prescribes an emetic and purgative, to clear the primæ viæ. Miss —, aged twenty-one, of a gross habit, was seized with an acute pain (on Saturday) across the patella, whilst at dinner, which continued getting worse. In a few hours more, inflammation was observed spreading up the thigh, when the poultice was taken off, and soap liniment used. The poultice was again applied. When Mr. H. saw her (on the Monday,) "the inflammation had spread along a third part of the length of the thigh, and downwards nearly to the ankle. The limb was much swollen, exceedingly hot, and a slight fluctuation was felt just below the patella. I applied the nitrate of silver over the whole surface of the inflamed parts, and did not open the abscess, as I knew from experience that the tumor would subside, rather than increase, soon after the application of this remedy. I directed an emetic and purgative medicine, and desired a fracture cradle to be put over the limb, which was kept exposed. On Tuesday, the inflam-

mation was quite arrested, and there was no heat. I opened the abscess below the skin, and some fluid was evacuated, which had more a serous than a purulent appearance. I applied the nitrate of silver within the cavity of the abscess." On the following day there was an increased inflammation below the part on the foot, attended with swelling. The Argent. Nit. was again applied; and on the following Wednesday the patient was convalescent, and only required a bandage till the swelling was gone.

Four cases of this kind are related.

In whitlow, when suppuration has commenced, Mr. H. advises the part to be opened freely, and the Argent. Nit. to be applied within the opening, and then the part to be enveloped in a cold poultice. In slight cases, the Argent. Nit. is advised to be passed slightly over the part, and in this manner suppuration and a continuance of the inflammation has been prevented.

Mr. H. observes, that he does not at first use the nitrate of silver in erysipelas, but resorts to every active constitutional means of cure. Six very interesting cases of this kind are given; two are related in a letter by Dr. STORER, addressed to the author. We transcribe Dr. Storer's letter, as he was an impartial observer of the effects of the remedy.

"Your late treatise had apprised me of your mode of using lunar caustic in the treatment of certain wounds and ulcers. I had not lost sight of the facts there detailed, and have been gratified to find, by repeated inquiries, that this plan of treatment continues to be confirmed by its success in your hands, and by other surgeons who have adopted it.

"It is now understood that it is capable of being extended with signal benefit to old and extensively ulcerated legs, of which one case that I have seen is certainly an example. In cases of local disease, such success does not exceed the ordinary bounds of expectation; nor is it without an analogy to the general application of this substance. When I heard that for some time you had adopted the same plan of extinguishing cutaneous inflammation, not merely in symptomatic erysipelatous affections, but also in that constitutional erysipelas which is often epidemic, and always ushered in and accompanied with fever, I confess that I could expect no success from a practice militating so directly against the views generally entertained of the nature of this disease, and would give no ear to it without ocular demonstration of its utility. I have seen two cases of constitutional erysipelas treated upon this principle, and, as far as two cases will go to authorize a conclusion, mine must be greatly in favor of the practice. The first was that of a healthy young woman, upwards of twenty years of age, seized

with rigor, followed by smart fever, and on the second day by a complete erysipelas of the face, extending to the hair on the forehead. The fever continuing, with a further extension of the inflammation, after bleeding, purgative and saline medicines, and a small vesication having arisen on the cheek, it was judged necessary on the third day to apply the caustic over the whole extent of the erysipelas. The patient's own account was, that she suffered considerable pain for ten hours, but from that time the feverish symptoms ceased, and the inflammation was arrested and subdued. When I saw her, the fourth day after the application of the caustic, there was neither fever nor any remains of erysipelas. The face was as black as an African's; but, in a few days more, I found her free from all symptoms of disorder, the epidermis peeling off, and the complexion underneath quite natural.—The other was a fine healthy boy, sixteen months old, who, after a feverish attack, had erysipelas on one hip and thigh, which extended partially to the leg. In this case also the fever and inflammation had subsided in forty-eight hours and upwards after the application of the caustic. The account of the child's mother was, that it cried very much for an hour after, then fell into a long and calm sleep, out of which it waked without fever, and calling out for food. In three days after, when I saw the child, it was quite well, and the scarfskin of the inflamed parts separating. This is the extent of what I have observed of this novel mode of treating erysipelas, and which has surprised as it has satisfied me. Sincerely wishing success to your endeavours to improve the practical part of your profession, I am, &c.

"JOHN STORER."

Out of five cases as relating to the effect of this remedy in inflammation of the absorbents, there are two briefly related by Dr. M. HALL, in a letter addressed to the author. One of these we will give in Dr. Hall's own words:

"The case was that of a young lady, aged twelve years: it began by a chilblain upon the heel; inflammation of the absorbents up to the groin followed; suppuration took place in twenty-four spots. The nitrate of silver was not applied during the first five weeks: this was very much regretted after its effects had been observed. The patient was seen by Mr. Lawrence and Mr. Wardrop, who both expressed themselves much interested in it. As the case would be long, I shall simply enumerate the effects of the application of the nitrate of silver, as they presented themselves to my observation:

"1st. It prevented suppuration in many places where the redness and tenderness were recent, yet such as before had inevitably led to the formation of pus.

"2d. If suppuration had taken place, the tenderness was still promptly removed, and the pus, from being thick, white, and opaque, was rendered first thin and somewhat limpid, and perhaps

streaked with blood, and then by degrees perfectly watery and limpid.

"3d. Where the pus approached the surface, a small opening formed, by which it exuded, and it became unnecessary to use the lancet.

"4th. The abscess was far more disposed to heal than any of those to which the nitrate of silver had not been applied."

Dr. Hall observes, that he has seen the early application of the nitrate of silver along the course of absorbents subdue the disease at once.

Mr. Higginbottom's mode of treating punctured wounds will be best explained by giving two or three cases:

"I.—A servant maid, aged twenty-four, applied to me with a swelling of the middle finger, and of the back part and palm of the hand, attended by such pain as to prevent her sleeping in the night. She thought this affection had arisen from a puncture by a pin or needle in washing. On examination, I perceived a small wound at the middle of the finger, at the first joint; and, on removing the skin with a lancet, a little pus escaped, and left a very small cavity. I applied the nitrate of silver within this cavity and over and beyond the inflamed parts of the finger and hand, previously moistened by water, and I left them exposed to dry. I prescribed an emetic and purgative medicine, and desired that the hand might be supported in a sling. On the following day, my patient stated that her hand was perfectly easy, and had been free from pain from the time the sense of heat, occasioned by the application, had subsided; she had passed a good night; the inflammation of the hand was completely checked in its progress; the swelling remained as before. On the next day, the patient made no complaint; the swelling had become soft and puffed to the touch. In a few days more, the cuticle began to peel off, and in one point, where it was thick, there was a slight degree of tenderness. From this time there was no further trouble or complaint.

"II.—Mr. Cocking's son, aged twelve, received a stab in the palm of the hand from a penknife, which has been followed by much swelling and pain, the punctured orifice being nearly closed. I applied the nitrate of silver within the puncture, and directed a cold poultice to be laid over the whole hand. On the following day, I found the poultice had not been applied; there were more pain and swelling; an eschar was formed over the puncture, which I removed, and thus gave issue to a considerable quantity of pus. I again enjoined the application of a cold poultice, kept constantly moist with cold water. On the succeeding day, the inflammation had greatly subsided. I repeated the application of the nitrate of silver, and poultice. On the fourth day, the inflammation had nearly disappeared, and on the fifth, entirely.

"In such cases, the nitrate of silver unites the advantages of at

once opening the puncture and of subduing the inflammation, thus preventing the formation of deep-seated abscesses."

III.—Mr. Higginbottom gives the following case in order to point out the mode of treatment he would recommend in wounds received in dissection; and this seems to coincide entirely with that Sir A. Cooper advises.

"About eight o'clock in the morning, I received a puncture in the examination of a puerperal case: I merely washed the part. About four o'clock, my attention was called to a sharp pain in the punctured part, on examining which there appeared a little elevation of the skin. In three or four hours more, there was more swelling round the puncture; and at this point there was a small tumor, about half the size of a large shot-corn. I experienced a little headach, to which I was quite unaccustomed. I applied a spirituous lotion, and went to bed. In the night I had an increase of pain, and became feverish and restless, with increase of headach; the thumb and hand were becoming much more swelled, and the absorbents up the arm inflamed. I took an emetic, and afterwards a dose of calomel, followed by a saline purgative and an enema; and I applied the lotion constantly to the hand and arm. Afterwards I began to take two grains of the Submurias Hydrargyri every three or four hours.

About four o'clock on the following day, I experienced excessive pain in the punctured part: I therefore particularly requested that I might have a free incision made into it, though I knew no supuration could have taken place. This was done by the lancet. The incision gave considerable relief to the part, and for a short time the pain of the head was better. A large cataplasm was applied. In the course of the evening I experienced a slight chilliness, with violent fits of vomiting, which continued for about half an hour; this was succeeded by great heat, and afterwards by profuse perspiration, at which time I became much easier, until it was followed, in the course of about half an hour, with another fit of chilliness and vomiting; which was again succeeded by a hot fit and perspiration; which were repeated at intervals for twelve hours, the second being attended with very violent heating pain in the head. The hand was now become twice its natural size, and the arm was considerably swelled as high as the elbow, with some enlargement of the axillary glands. The tonsil on that side of the throat was also a little enlarged and painful. My medical attendant recommended the loss of blood: twenty ounces were therefore immediately abstracted, with decided relief of every symptom.

The calomel had begun to affect the gum; the saline purgative was continued. I had no return of the vomiting, but was in every respect better.

"It is my opinion, from what I have since experienced, that this severe and painful illness would have been entirely prevented by the free application of the nitrate of silver, and that it would have

been the only local remedy necessary. In the second state of the puncture, where a small tumor is raised, I would remove this tumor by the lancet, before applying the nitrate of silver to form an adherent eschar, and I would adopt the precaution of applying it on the surrounding skin, and beyond the swelling. At a later period still, I am of opinion that, when the hand had become much swollen and tense, and the inflammation had spread up the arm, the external application of the nitrate of silver would have subdued and checked the inflammation, and that the constitutional affection would have ceased."

This remedy is recommended to inflamed leechbites, and to the bites of animals.

Here we will give a short passage in the author's own words, as relating to this application to bruises, in which he strongly recommends it, and gives some cases illustrative of its good effect.

"In this place I have, indeed, to make an observation of particular interest, both in a pathological and curative point of view: it is that the formation of the slough has always been prevented by an early application of the nitrate of silver, in the cases which have hitherto fallen under my care. This fact may probably admit of explanation in the following manner: the bruise partially destroys the organization of the part, and the subsequent inflammation completing what the injury had thus partially effected, a loss of vitality takes place, and the slough is formed. The early application of the nitrate of silver has already been shown to have the remarkable effect of preventing the inflammation consequent upon certain wounds; and in this manner, in the case under consideration, the part recovers from the injury done to its organization, and its vitality is preserved, one of the causes of the slough being removed.

"CASE.—J. Jennings, a bricklayer, aged twenty-six, fell through the roof of a house, and bruised and lacerated his shin rather severely, to the extent of an inch and a half in one part, and in a less degree in several others. I applied the nitrate of silver to the wounds immediately. On the following day the eschar was found to be adherent, and there was neither pain nor swelling. The eschars separated in nine days, leaving the wounds healed. It is remarkable that the eschar remains a greater or less time over the wound according to the severity and exigency of the case. This case being less severe than the former, one of the eschars remained upon the wound during a much shorter period of time.

"Mrs. Willoughby, aged fifty-one, received a blow on the arm, which caused a wound, and broke the radius: the wound, however, did not communicate with the broken bone. The part was inflamed, but the arm itself was not swollen. I saw her immediately after the accident, and applied the nitrate of silver on the whole of

the forearm, and over the wound. I put the arm upon a splint and sling, and prescribed a dose of the *Submurias Hydrargyri* and a dose of purgative medicine. On the following day she complained of little or no pain, and had very little smarting from the application of the nitrate of silver; and there was less swelling than usual in such cases. The eschar was adherent over the wound; there was slight vesication on the arm. The next day she expressed herself as surprised that she had had so little heat or pain. Two or three days afterwards the eschar was adherent all over the arm, and nothing was necessary but to keep it in the splint till the bone should be united."

Mr. H. has not yet had an opportunity of adopting this mode of treatment where the larger bones have been broken, but he feels very little doubt that the trial will be successful. No evaporating lotion, or other means which he has ever yet seen employed, has the same power of preventing and subduing external inflammation in such cases as the nitrate of silver.

Mr. H. has abandoned healing ulcers by eschar, excepting in those cases where the ulcers are small and free from inflammation, where there is little discharge, and where the parts are not exposed to much motion or friction.

"The plan of treatment which I have more recently adopted in large ulcers attended with inflammation, is far more successful, and requires very little care or attention on the part either of the surgeon or patient. If there be swelling or œdema, I direct the patient to take a dose of opening medicine, to apply a common poultice of bread-and-water over the ulcer, and to keep in bed for four-and-twenty hours. The inflamed parts must be washed with soap and water, and wiped dry. They are then to be moistened with water, and a long stick of the nitrate of silver must be passed all over the inflamed and ulcerated surfaces, twice, and rather more freely on the ulcer itself and on the surrounding skin. Lint must then be put on the ulcer, and the whole of the inflamed and ulcerated parts must be covered with the neutral ointment spread on linen; a compress, with five or six folds of fine linen, is then to be applied over the ulcer, and a common roller, not too tight, to keep on the whole. The leg is to be examined on the fourth day, when it will be found that the inflammation is nearly, if not entirely gone, and the ulcer in a healing state. The nitrate of silver must then be applied on the whole of the ulcer, and once lightly over the skin immediately surrounding it, one or two inches in breadth; the lint and ointment are to be applied as before, and the bandage applied rather tighter. The case must be treated in this manner every third or fourth day until the ulcer is healed. I would recommend wearing a calico roller for some time afterwards, till the leg has recovered its usual strength. The patient may walk about after the first or second application of the nitrate of silver."

The foregoing observations, as relating to the treatment of ulcers, are of the greatest practical utility; and every surgeon who has had much experience among the poor, either in private practice or in attendance on a dispensary, we are assured will agree with us; for there are no cases (treated as old ulcers of the legs have been hitherto,) which so much exhaust the funds of a dispensary or take up so much of the surgeon's time, and, we may add, which produce such protracted suffering to the patient.

The cases of small ulcerations we shall pass over, and give some of the cases of ulceration with inflammation, and those of old ulcers, as in at least ten or twelve cases of the latter we have seen the remedy attended with the most marked success, and in all the usual mode of treatment had been adopted and persevered in for some months, without the least benefit. Mr. H. adds occasionally to his usual mode of treatment the plan recommended by Mr. Baynton and improved by Mr. Scott.

1.—Mary Williamson, aged sixty-nine, fell down and broke her shin: this was followed by swelling. She rubbed the part with the soap liniment, which caused inflammation. She afterwards applied a poultice, but the leg still got worse for six weeks. She then went to an infirmary, and remained under surgical care for some time. The sore was now healed, but the inflammation still remained over the whole of the leg. The patient then placed herself under the treatment of an empiric for three weeks. Still uncured, she returned home into the country, and attempted to work at a cotton factory. This she did with much suffering, and soon became quite unable for any avocation.

"She came to Nottingham, and fell under my care. At this time the whole of the leg was inflamed, and affected with œdema. A large abscess had formed over the malleolus internus, and a small one on the opposite side. There were several ulcers on the shin, from the size of a crownpiece to that of a sixpence. I prescribed a dose of opening medicine, and directed her to keep in bed for twenty-four hours. I washed the leg afterwards with soap and water, opened both abscesses with the lancet, and applied the nitrate of silver over the whole extent of the inflamed surface, over the ulcers, and within the abscesses. I then applied a poultice to each of the abscesses, lint upon the ulcers, and the neutral ointment over the whole of the inflamed parts, in the manner already described. In four days, the patient having still kept her bed, all inflammation was gone, and the ulcers and abscesses were in a healing state. I again applied the nitrate of silver to the ulcers and abscesses, and dressed them with lint and the neutral ointment. In four days more there was very great improvement; the abscesses were nearly well, and the ulcers healing rapidly. In other four days the abscesses were healed, the ulcers healing fast."

By four more applications, the ulcers were all made well. It was necessary in this case to continue the application of a bandage to the leg twice a week for several weeks, and to apply the nitrate of silver to parts which became slightly inflamed from time to time.

" II.—Mrs. A. had been subject to ulcers of the right leg for seventeen years; she had had regular surgical attendance for a year or two at a time; but, as is too customary in such cases, the ulcers had always broken out again. This case had not lately been attended with much inflammation. Mr. Baynton's plan having been used for two years, only one ulcer remained: this was situated on the outer ankle, and was about the size of a sixpence, and not deep; the surrounding skin was very hard, and she complained of an intolerable itching, for which cold water, applied through the medium of a bandage, gave but very temporary relief. She had for years had all the symptoms consequent upon such ulcers; she had suffered much from loss of rest, and was totally unable to follow her employment. I passed the nitrate of silver upon the ulcer, and over the surrounding inflamed skin, and I applied lint, and the neutral ointment spread on linen, over the ulcer; and I continued the bandaging according to Mr. Baynton's plan. In five days all inflammation and itching were gone, and the ulcer was healing. In three more dressings, on each third day, the ulcer quite healed.

" It is now two years since this case was cured, and the patient has had no return of inflammation, irritation, or ulcer. She has washed the leg with cold water every morning, and constantly applied calico bandages.

" III.—Timothy Coleman, aged thirty-two, whilst in a state of intoxication, burnt his shoulder and arm very extensively. He was under the care of a surgeon, and the sore was healed in ten weeks. There still, however, remained an inflamed surface, larger than the size of the hand, over the deltoid muscle. It had the appearance of a fungus cicatrised over; it was attended with so much heat and pain as to prevent him from sleeping at night, or following his employment in the day, for thirteen weeks, even after it was said to be cured. He had used a number of remedies. His health continued good.

" I first saw him on June the 20th, 1827. I applied the nitrate of silver, as in external inflammation, over the whole diseased surface. I directed the part to be exposed to the air for three days, then to be covered with the neutral ointment. My patient resided at a distance in the country. I did not see him again for a fortnight, when he informed me that, eight hours after the application of the nitrate of silver, he had more ease than he had experienced since the accident; that he was nearly free from pain, and slept well. I again applied the nitrate of silver very freely on the whole affected surface, as there still remained several inflamed spots, besides several slight ulcerations caused by the nitrate of silver. I

then covered the part with the neutral ointment. In another week I saw my patient again. He said he had suffered more from the last application than from the former one; that it had acted more like a blister, that there had been a very free discharge, and that the eschar had separated sooner. There appeared, however, scarcely any irritation, except from a few superficial ulcerations, on which I passed the nitrate of silver very lightly; I continued the neutral ointment. A few weeks afterwards this man called on me to say that he was quite well. This peculiar case is almost incurable by any other means."

There is a short appendix to the volume, giving some cases illustrative of the use of the nitrate of silver in disease of the knee-joint, inflammation of the urethra, gunshot wounds, neuralgia, ulceration of the tongue, and irritative ulceration near the eye, and fungous ulcer of the navel of infants. It also contains a letter from Mr. WEBSTER, of Dulwich, to Dr. M. HALL; and another from Mr. J. BROWN, Camberwell, in which the latter gentleman communicates two cases, one of a delicate female, who, after the birth of her first child, wasted in flesh, and was subject to leucorrhœal discharges, with great debility; her general health was subsequently in other respects much deranged, and at length her wrist-joint and thumb became enlarged and painful. She had consulted Sir A. COOPER and Mr. ABERNETHY, and, although her general health was somewhat relieved by their prescriptions, the enlargement of the wrist was no better; and, in addition to this, her elbow was now swelled and extremely painful. These local affections were cured by the nitrate of silver, and her general health was restored by the sulphate of quinine. The other case was that of a laceration of the fascia of the forearm, depriving the patient of the power of using the limb: this was also cured by the application of the nitrate of silver.

Mr. Webster has written a long letter, in which he has suggested a theory to explain the action of this remedy. He has employed it with benefit in a case of extensive burn, stricture, &c.; he has also applied it in some cases of a peculiar affection of the larynx, of which he gives a description. The three first cases proved fatal; in the third, the only remedy out of a great number which proved at all beneficial was the application of the nitrate of silver: this was used at the suggestion of Mr. WARDROP. Mr. Webster, addressing Dr. Marshall Hall, observes,

"It was the relief afforded in this case, and some conversation I had with you on the use of the nitrate of silver in erysipelas, &c. which induced me to give the remedy a full trial in the following one:

"Jane Thornback, aged four years, has been complaining for a fortnight of languor, debility, headach, and other feverish symptoms. About a week ago she first noticed that her throat was sore. She had difficulty in swallowing or articulating, and the tonsils became enlarged externally. Yesterday her respiration was affected, and there supervened a short, dry, ringing cough, with an inclination to vomit, and an occasional sense of strangling. The present symptoms are, considerable emaciation; pale, sunken, and anxious countenance; purplish tinge of the lips; respiration difficult and increased in frequency; the inspiration sonorous and rattling, the *alæ nasi* acting rather strongly; the throat is painful, especially in swallowing; the uvula and both tonsils are swelled and covered with sloughs, the margins ulcerated, the surrounding parts of a dark red colour; the pulse 120, and weak."

After describing the above case and its treatment, with the post-mortem examination, much more at length than the limits of a review will enable us to do, Mr. Webster observes: "Though this case proved fatal, yet I should, if another instance of this intractable complaint presented itself, pursue the same remedies; as, in three cases, two recovered, which, in my experience of the three previous ones, I think I might fairly say, under the ordinary treatment, would also have proved fatal."

Mr. Webster has made some remarks on the superior advantages of the nitrate of silver to cantharides for the purpose of blistering. In these observations we fully agree with him, and must add that we have seen more than one case where the local irritation produced by the *Emplast. Lyttæ* has been so excessive, and the sore thus caused become so unmanageable as to produce death: this, we feel convinced, would not have occurred had blistering in these cases been produced by the nitrate of silver.

We will observe, before taking leave of our author, that we have employed the remedy within the last few days, in a case of enlargement and stiffness of the first joint of the thumb, the consequence of a wound into the capsule: with three applications this inconvenience was removed.

We hope Mr. Higginbottom will continue his investigations respecting this singularly useful remedy. In the mean time we recommend our readers to peruse this little volume, and judge of its merits for themselves. It is purely practical, and therefore well calculated to interest and instruct the great body of the profession.

Further Observations on the Use of the Lancetted Stilettes, in the Cure of permanent Strictures of the Urethra: with additional Cases. By RICHARD ANTHONY STAFFORD, Member of the Royal College of Surgeons, and lately House Surgeon to St. Bartholomew's Hospital.—8vo. pp. 64. Longman and Co. London, 1829.

SOME surgeons contend that there are no cases of stricture of the urethra which may not be overcome by the patient and repeated use either of the wax or metallic bougie. This opinion is, however, but very partially advocated, and it is generally admitted that instances not unfrequently occur in which none of the ordinary instruments can be passed into the bladder, whatever may be the manual adroitness or perseverance of the practitioner. Assuming, then, that we have to deal with a case of stricture which is totally impermeable, our alternations of treatment have hitherto been two: either to attempt the destruction of the stricture by the application of caustic bougies, or to cut down upon the urethra, divide the stricture with the knife, and then endeavour to restore the natural passage by the use of the catheter and the union of the external wound. The first of these modes of treatment was once thought to be almost infallible and free from danger. More extensive observation has since shown the contrary, and it is now well known that the caustic frequently fails, and that the use of it is often followed by profuse hemorrhage and other alarming symptoms. Even when it does succeed, the process of cure is usually very tedious. The operation of dividing the strictured part by incision is generally successful, if it is skilfully executed. That it is a painful one, and at all times formidable to the patient, must be evident, although we would not, with Mr. Stafford, draw any comparison between it and the operation for lithotomy.

The plan proposed by Mr. STAFFORD to avoid the uncertainty and hazard of the one mode of treatment, and the pain inflicted upon the patient by the other, we formerly described* in our notice of his first work upon this subject. The object of Mr. S., in the publication of these "Further Observations," is to prove, by additional evidence, that the apprehensions which have been entertained respecting the safety of his instruments are imaginary, and that the success of their employment is greater than that to be expected from any other mode of treatment. Mr. Stafford has ope-

* London Med. and Phys. Journal, September 1828, p. 240 et seq.

rated with the instruments he proposes more than twenty times, without the slightest dangerous symptom occurring at the time or afterwards. He has divided strictures in the urethra, in almost every part of its course, at distances of one, three, four, five, and six inches from the orifice, at the point immediately behind the bulb, and throughout the whole membranous portion. Some of these strictures were half an inch, others an inch, and one was two inches in length. He operated at one time on four strictures in the same urethra, varying from one fourth of an inch to above an inch in extent; and in no instance was there a symptom to occasion even slight alarm.

"The small quantity of blood lost from the operation was surprising, only in one case amounting to a tablespoonful, and usually not exceeding a few drops or a teaspoonful. This fact is so extraordinary that, unless there had been repeated proofs, it would hardly be credited. The inflammation which has occurred has never been very great; and, when it has taken place, I am much inclined to attribute it to the irritation excited by the catheter having been left in the bladder. I am the more confirmed in this opinion from the fact that, in the only case in which I omitted its introduction, no sensible inflammation followed.

"The superiority of the division by the lancetted stilettes over the only plan of treatment which can be brought in competition with it, that by the caustic, is evident from the following circumstances: The pain is much less. This was admitted by every patient who had experienced both plans of treatment. In truth it is so little as, by their own confession, to be not worth mentioning. As a proof of this, all my patients stood during the operation, which did not usually occupy a longer time than a period varying from one to two minutes. The bleeding is not so great as what often attends the passage of a common bougie, consequently very much less than that after the application of caustic, in which the loss of half a pint or a pint of blood is no uncommon occurrence. The formation of a false passage, which, in the most experienced hands, will inevitably sometimes occur from the use of caustic bougies, has never resulted in any case where I have employed the instruments. The last, and perhaps principal, proof of superiority, however, of this plan of treatment, is the shortness of time occupied, and the rapidity of the cure. The length of time necessary for the common method, of course, varies indefinitely: three months may be stated a short period; and it often extends to one or two years, with a great chance of the recurrence of the disease in a more aggravated form. On the contrary, the longest time which it has been found necessary to pass a bougie after dividing the stricture with the lancetted stilette, has never exceeded six weeks; and in those cases it was passed merely to satisfy myself and the patient of the nonexistence of the disease. Usually a large-sized

bougie has been introduced almost immediately after the operation, and the cases have not required attendance more than three weeks or a month." (P. 9.)

A perusal of the cases will show that the cures were complete.

Mr. S. has examined the urethra after an interval of one or two years, and he has been able to pass a large-sized catheter without difficulty, and the patients have made water in a natural manner. When he published his former work upon this subject, the author had had no opportunity of ascertaining the state of the urethra after death: he has now a preparation of the urethra.

"His stricture, which was one of twenty-three years' standing, and more than an inch in extent, was situated at the bulb, and in the membranous portion. The operation was completely successful, and he made water naturally. He lived nearly two years without any symptoms of stricture, and died, *æt.* seventy-six, from diseased lungs, and the infirmities of old age.* On examination, the caliber of the canal was found natural throughout; there was no hardness round the part that had been formerly contracted, and the membrane lining it was continuous with the rest of the urethra. The only difference that could be perceived was a little redness and roughness, and the incisions made by the instrument could be traced, though not very distinctly." (P. 12.)

The present pamphlet contains a relation of eleven cases, in addition to those formerly detailed. We shall give an abstract of each.

CASE I.—F. J. Esq. applied to the author, at Brighton, on the 8th August, 1828. In the autumn of 1799, a difficulty in passing the urine was first experienced. Stricture was detected about three inches down the urethra, and the caustic bougie was employed at intervals for about a month. Considerable effusion of blood followed each application of the instrument. The patient was then discharged by his surgeon as cured. In 1820 the complaint returned, and Sir EVERARD HOME discovered the stricture was formed in the same place as before. The caustic was now employed but a few times, as it caused great pain and irritation in the urethra, and very distressing rigors were brought on. A metallic bougie was passed every third or fourth day. In two months relief was obtained, but not a cure. Bougies were occasionally passed by the patient himself until 1826, when he became so much worse that the urine could only be

* "The name of this man was John Sych (whose case is related at page 143). On his coffin his age was marked seventy-six; so that he must have been more than seventy-four when operated on."

voided drop by drop. Pain in the urethra excessive, and, from straining, great soreness in the abdomen and loins. General health much affected. The smallest bougie could only be passed, and even that with much pain and difficulty. The caustic was again used several times, as the case continued obstinate: it failed in producing the desired effect, and gave rise to symptoms threatening retention of urine. It was therefore abandoned. The symptoms continued increasing in severity, and at length an attack of retention of urine occurred.

Mr. J. now placed himself under the care of Mr. Stafford. At this time the health and spirits of the patient were almost exhausted. He had not made water for twelve hours, and had only passed it by drops, and involuntarily, for two years. To relieve the excessive irritation of the urethra, which prevented the introduction of a bougie, twelve leeches were applied to the perineum; fomentations, warm bath, and opiate injections. A bougie, the size of a knitting needle, was now passed. The stricture was three inches from the orifice. The day after, Mr. S. operated with the double-lancetted stilette over the wire. The patient stood up during the operation, which lasted about one minute and a half; it caused but little pain. Only a few drops of blood followed the incisions. The stricture was divided throughout its length without withdrawing the instrument; the catheter could only be passed as far as the membranous portion: here the spasm was so violent that the author was obliged to desist. A No. 9 bougie was left in the urethra through the divided stricture. Leeches and fomentations were immediately applied. In the evening the patient withdrew the bougie, and voided the urine in a full stream, and with little pain. A week after the operation was performed the urethra appeared quite healed, and a catheter, No. 8, passed easily into the bladder. This was repeated twice a week for a month, gradually enlarging the size of the catheter to the natural caliber of the urethra. The health of the patient was rapidly restored.

CASE II.—W. Chaters, æt. fifty, unhealthy and emaciated, admitted into the Marylebone Infirmary; has had a stricture for twenty-eight years. About eighteen years ago the caustic was applied several times during the space of three months, without benefit. He was considered incurable, and ever since has suffered the worst symptoms of stricture, and passed his urine *guttatim*, or involuntarily; he has had frequent attacks of retention of urine, and constant rigors. Since the application of the caustic, many

ineffectual attempts have been made to introduce a bougie. An impermeable stricture was discovered about six inches down the urethra. At the request of Mr. C. PHILLIPS, the author operated: he divided three fourths of an inch of the stricture with the single-lancetted stilette. The pain was trifling, and the bleeding amounted only to a few drops. On the next day, the patient had felt but little inconvenience, excepting, as had been customary with him after the use of a bougie, he was attacked by a slight rigor; he had made water in a small stream. The second day after the operation, a small-sized gum catheter passed easily into the bladder: it was left in the urethra. In ten days a No. 13 catheter passed without difficulty.

CASE III.—The patient had laboured under stricture for two years. For a year, common bougies had been employed with advantage. Six months afterwards the stream of urine gradually diminished, until it was not larger than packthread. The stricture was six inches from the orifice, and was too tortuous to admit a metallic instrument. About half an inch of the stricture was divided with the single-lancetted stilette. The relief was immediate, and the stream of urine so much enlarged that the patient did not consider any further treatment necessary.

CASE IV.—Thomas Facey, æt. forty-three, admitted into the Marylebone Infirmary, November 6th, 1828; has a hardened contraction of the orifice, and another, of about half an inch in length, an inch further on. Four inches from the orifice there is a permanent stricture, and also at the bulb; the urethra quite impermeable. Been strictured twenty years, and discharged as incurable from several hospitals. Is now much emaciated from the effects of the disease. Urine passes *guttatim*, constantly, and involuntarily.

Nov. 10th.—Mr. S. enlarged the orifice to its natural size, and divided the second stricture. A bougie was left in to prevent the parts from closing. Leeches to the perineum. In a few days the divided parts had healed, and the smallest bougie would pass through the fourth stricture, which before was impermeable.

On the 28th, Mr. S. operated over the wire, with the double stilette, upon the third stricture, about half an inch in extent; and also divided the fourth stricture at the bulb and membranous portion, more than an inch in length. Less than a tablespoonful of blood was lost, and the operation lasted two minutes. A small catheter left in the bladder. Rigor in the night, but no other unfavorable

symptom. Urine had passed through and by the sides of the catheter.

December 1st.—No. 8 catheter introduced with ease into the bladder: in a few days, No. 11. In five weeks the cure was considered complete.

CASE V.—An impermeable stricture, about five inches down the canal, was divided with the single-lancetted stilette. Immediately after a catheter could be passed into the bladder. The man was a patient of Mr. VINCENT's, in St. Bartholomew's Hospital.

CASE VI.—John Edwards, æt. forty-nine, in the Marylebone Infirmary; strictured for some years; prepuce entirely adherent to the glans, and the orifice so closed and hardened that it would not admit a larger instrument than a No. 2 catheter. An impermeable stricture about five inches down the canal. Hardened edges of the prepuce were circumcised, and the prepuce itself dissected from the glans, and thrown back as in the operation for phymosis. A month elapsed before the parts healed sufficiently to allow of more being done. The orifice was then enlarged to its natural size, and kept open by the introduction of a bougie. A short time after the wire was introduced, and left in the urethra, and the operation was performed with the double-lancetted stilette. On the next day, the urine had been freely voided, but the urethra was too irritable to allow the passage of a catheter. At the end of three weeks, a No. 12 steel sound passed into the bladder with facility, and the patient was discharged cured.

CASE VII.—F. B., æt. sixty, a general officer; had been suffering from strictures for years, and lately they had greatly increased; prostate gland also enlarged and hardened. Other modes of treatment having failed, this gentleman determined to have the strictures divided with the lancetted stilette. In less than a fortnight from the operation, both the strictures would admit a steel sound, No. 15, into the bladder. Patient since continued well.

CASE VIII.—Much relieved by the operation, although the case appeared almost hopeless. The friends of the patient, being alarmed at so novel a plan, interfered, and prevented the cure from being completed.

CASE IX.—X. Y. Z. had an impermeable stricture five inches and three quarters from the orifice. Urine passed *guttatim*, sometimes dribbling involuntarily; he was obliged to rise once or twice every hour during the night to void it. Suffered several times from complete retention. Had undergone a course of bougies under ten surgeons of eminence,

at different times, without avail. This patient was quickly relieved. He remained free from any unpleasant symptoms, and was able to retain his water for eight or ten hours.

CASE X. presents nothing differing from those before mentioned. The treatment was successful.

CASE XI.—Mr. C., a barrister, æt. thirty-seven, has had strictures for eighteen years, and for the last three years he has periodically gone through a course of bougies. Whenever he leaves off their use, however, the contraction returns. Profuse discharge from the urethra. A stricture behind the bulb would with difficulty admit the passage of the smallest sized gum elastic catheter through it. The author operated over the wire. The operation did not last a minute, and only a few drops of blood followed. The patient was astonished that he felt so little pain.

When the sheet containing the relation of this case was going to press, he was so rapidly improving that there could be no doubt of his speedy recovery.

To avoid repetition, we have not mentioned in each case one part of the treatment, which Mr. Stafford frequently finds necessary, both before and after the employment of the instruments. If the urethra is very irritable, and there are symptoms of local inflammation, with much general disturbance, local bleeding, opiate clysters, fomentations, &c. will be required.

The evidence that Mr. Stafford has now laid before the profession is certainly very strong in favor of the plan he proposes. We before felt ourselves called upon to speak with much caution upon the subject, and we still think that if ever these instruments are brought into general and common use, mischief will arise. We are confirmed in this belief when we bring to our recollection the many cases we have seen in which, from the *mal-adresse* of using even the common bougie, false passages in the urethra, and other injurious consequences, have been inflicted upon the patient. Of Mr. Stafford's skill and dexterity in the use of the instruments we have no doubt; and he has now so perfectly convinced us of their safety and efficacy, when they are dexterously employed, that, if we were ourselves labouring under an impermeable stricture, we should place ourselves under his care with the most perfect confidence.

A Synopsis of Modern Medical Jurisprudence, anatomically, physiologically, and forensically, illustrated; for the Faculty of Medicine, Magistrates, Lawyers, Coroners, and Jurymen. By J. S. FORSYTH, Surgeon, &c. 12mo. pp. 600. Benning, London, 1829.

It is lamentable, but nevertheless it is very true, that the respectability and character of the profession have frequently suffered in the estimation of the public, from the very sorry part that medical practitioners have played when they have been placed in a court of justice, in the deeply responsible situation of witnesses in cases of medico-legal investigation. The vast importance of medical jurisprudence is universally acknowledged, but still it is more neglected by the great mass of practitioners than any other branch of medical science. It may be impossible, indeed, for the medical student, considering the variety of subjects that must necessarily engross his mind, to labour through many of the elaborate works that have been published upon this subject. Such a synopsis as the present he will therefore find a very useful addition to his library. The judge, the lawyer, and the jurymen, will also find it a very convenient book of reference.

In the first chapter the author offers a few interesting remarks upon the leading points of the law of evidence. As medical men are so frequently called upon to give their testimony in a court of justice, they should at least be acquainted with the leading parts of the law of evidence, and particularly such as more immediately bear on their professional knowledge. It has been supposed that medical men may avail themselves of the privilege enjoyed by legal advisers, and that they are not bound to divulge the secrets of their patients, reposed in them in the course of professional confidence. Such confidence ought not to be violated on any ordinary occasion; but, when the ends of justice absolutely require the disclosure, there is no doubt that the medical witness is not only bound, but compellable to give evidence, ever bearing in mind that the examination should not be carried further than may be relevant to the point in question: of this the court will judge, and protect the witness accordingly. The manner in which a medical witness should give his evidence differs but little from that in which evidence ought to be given by any other profession or individual, the whole of which may be comprised in the following pertinent observations of Mr. HASLAM,* whom

* Haslam on Insanity, London, 1817.

Mr. FORSYTH quotes: "The important duty," he says, "which the medical practitioner has to perform when he delivers his testimony before a court of justice should be closely defined, conscientiously felt, and thoroughly understood; his opinion ought to be conveyed in a perspicuous manner; he should be solemnly impressed that he speaks upon oath, the most sacred pledge before God between man and man, and that the life of a human being depends upon the clearness and truth of his deposition; he is not to palm upon the court the trash of medical hypotheses, as the apology for crime; neither should the lunatic receive his cure at the gallows, by the infirmity of his evidence; but, above all, his opinion should be so thoroughly understood by himself, so founded by experience and fortified by reason, that it may resist the blandishments of eloquence, and the subtle underminings of a cross examination. The physician should not come into court merely to give his opinion; he should be able to explain it, and able to afford the reasons which influenced his decision: without such elucidation, his opinion becomes a mere dictum."

In the next chapter we enter into the immediate business of the volume, in which is discussed all the various subjects connected with forensic medicine. To give an analysis of a work which is itself, in a great measure, a condensed abridgment of other works, would be almost impossible. We merely wish to do fair justice to Mr. Forsyth's "Synopsis," by calling the attention of the profession to its general utility.

The fifth chapter contains some very good general rules for the examination of dead bodies, applicable to all cases where investigations are required. Before proceeding to dissection, it is proper first to examine the external situation and appearance of the body; and, to facilitate the investigation, the author lays down many important rules, which the surgeon will scrupulously attend to, if he consults his own character or the public interest.

"1. If death be apparently caused by a wound, the body should be first viewed, if possible, exactly in the position in which it was found. By moving it, the attitude of the extremities may be altered, or the state of a fracture or luxation changed, since the internal parts vary in their position with one another, according to the general position of the body. If it be absolutely necessary to remove the body, it should be done with great caution.

"2. The clothes should be removed, as far as is necessary, and it should be noted what compresses or bandages (if any) are applied to particular parts.

"3. After these preliminaries, the colour of the skin should be examined; the temperature of the body, the rigidity or flexibility of the extremities, the state of the eyes and of the sphincter muscles; noting, at the same time, whatever swelling, ecchymosis,* wound, ulcer, contusion, fracture, or luxation, may be present; also any fluid flowing from the nose, mouth, ears, sexual organs, &c., and indeed every thing varying from the natural state. The above cavities should be inspected, and particular attention paid to the state of the skin, so as not to mistake that bluish brown tinge which indicates the commencement of putrefaction, for ecchymosis. This distinction will be presently explained.

"At this period it may sometimes be necessary to delay the dissection for a few hours, and the wish of the examiner is, of course, to prevent putrefaction. To effect this, it has been recommended to put the body in a cool place, and cover it with ice, or it may be sprinkled with spirituous or aromatic substances. If it be intended to preserve it for some time, it should be washed with a strong solution of common salt and alum. The cadaverous smell present during the examination may be obviated, in a great degree, if the change be not too far advanced, by passing a current of chlorine, or the fumes of tobacco, through the chamber; or what would appear, in these cases, to answer the purpose more effectively would be the chlorurets, as directed by M. Labarraque, and of which Mr. Alcock has recently given a very good account.

"From the period the dissector commences until he concludes, there should be some one at hand, to take down all the facts that from time to time may be communicated; and this should not be delayed until the examination be completed, as many circumstances of importance may otherwise escape the memory.

"If there be an external lesion present, it should first be examined, and its nature described, its length, breadth, depth; also whether it has been inflicted with a cutting, pointed, or round instrument; whether it be accompanied with inflammation or gangrene; and whether any foreign bodies are found in it, such as balls or pieces of cloth. The scalpel should then be employed to trace its extent, but with judgment, so as not to render our researches useless, and to prevent a comparison of the external wound with the internal injury. The nerves and blood-vessels, particularly the arteries that are wounded, should be named; as should also the viscera, if any are in that state.

"If there be a contusion without a solution of continuity, the injury found in the internal parts should be particularly noticed, such as extravasation, rupture of vessels, &c.

"If the cause of death is a burn, its degree and extent should be examined, together with the state of the parts affected, whether inflamed merely or covered with blisters; the fluid contained in

* "By ecchymosis is here meant a black and blue swelling, either from a bruise or spontaneous extravasation of blood.

these blisters, and the condition of the neighbouring parts, whether sphacelated or gangrenous.

"If a *luxation* or *fracture* is present, notice the surrounding soft parts, the nature of the injury, whether simple or complicated, and the phenomena indicating the progress of disease or of recovery.

"Having stated all these circumstances, it is next necessary to proceed to the dissection in a systematic manner; and the rule here is to commence with an examination of the abdomen, as that part is most liable to run into putrefaction. We, however, should not desist because the cause of death is supposed to be perfectly discovered in one or the other cavity: all of them should be investigated.

"*Inspection of the head.*—On shaving the head, the integuments are to be inspected, and all injuries done to them are to be noticed. In particular, if a wound appear to be inflicted by a sharp-pointed instrument, its depth, direction, and connexion with the brain, should be minutely traced. The presence of inflammation, œdema, or sphacelus, must also be remarked. The same observations apply to injuries from cutting instruments. The bones of the cranium are next to be laid bare; search is to be made for fissures or fractures, taking care, at the same time, not to mistake irregular sutures for them; and for this purpose they should be rubbed over with ink. The strength of these bones is also deserving of minute inspection, as they not unfrequently are so thin or soft as to render a blow very destructive, but which, under ordinary circumstances, would only produce slight injury. The fracture should always be followed throughout its whole extent.

The brain and the membranes must be carefully inspected. Let it be noticed whether any matter or blood be interposed between the dura mater and the bones, or whether it is detached or inflamed. All morbid appearances in structure deserve attention; and the state of the vessels of the brain, the fluids present, and their situation, together with the changes in the substance, are highly deserving of attention. It should, however, be remembered that death sometimes follows from blows on the head, when no internal lesion can be found on dissection. It has been abundantly proved that the connexion between the brain, the viscera of the thorax and abdomen, are the cause of this, and the injury therefore is to be looked for in the latter.

"*The vertebral column* must be viewed throughout its whole extent, to ascertain whether it be fractured, dislocated, or contused. This part requires strict attention, since injuries of it are often of a very complicated nature.*

* "Foderé quotes a case from Jaegar, of a person who was struck on the neck by a loaded waggon, with such violence that both his upper and lower extremities became paralytic. He died in eighteen hours after the accident. No external appearances of injury could be observed, although an examination readily indicated that the seat of disease was somewhere near the sixth

" *The neck*.—We should carefully inquire whether the neck bears any marks of external injury, or traces of ecchymosis or pressure on it. Examine the great blood-vessels, whether they are filled with blood or empty; and the nerves, whether they are in their natural state. The œsophagus, pharynx, and larynx, must be examined. If wounded, detail the extent, depth, and shape of the injury, and particularly if the lesion is caused by fire-arms; its course, and the loss of substance present, with the inflammation or supuration (if any) existing, should be stated.

" *The thorax*.—On proceeding to the thorax or chest, it should first be ascertained whether the injuries it has received are superficial, affecting the integuments and muscles merely, or whether they extend to its cavity. If the latter, the following are subjects worthy of observation: The blood-vessels, the bones covering the thoracic viscera; inquire whether any of these are fractured, luxated, or diseased. Next, as to the respective organs, notice the lungs; and their internal as well as external condition; the pericardium and its contents; the heart and its great vessels; the diaphragm, the thoracic duct, and the phrenic nerves: all injuries or diseases of these should be stated in the report.

" *The abdominal cavity*.—The external covering of the abdominal cavity forms a subject of inquiry. Every spot, swelling, or extravasation, should be noticed, as also whether hernia be present, or whether there is any tumefaction of the part. The organs peculiar to either sex should be examined, and also the various viscera contained in this cavity: the stomach, mesentery, liver,* spleen,† pancreas,‡ kidneys,§ gall-bladder, intestines, bladder, &c. Each part should be viewed as to the quantity of blood contained in it, and which naturally belongs to it; all extravasations should be traced as to their quantity and nature; and particular inquiry should be made whether the changes observed are the

cervical vertebra; and accordingly, on dissection, its spinous apophysis was found broken at its base, and separated from its body, while blood was extravasated to the amount of four ounces.

* "The liver may present several morbid phenomena, which, in a dissection instituted for the purpose of discovering the cause of death, ought not to be overlooked. It may also be found ruptured; an occurrence which may take place where little or no external injury can be perceived, as from a sudden fall, or from the application of strong pressure applied to the upper part of the abdomen, such as might be occasioned by the passage of a heavy carriage over the body. See *Med. Trans. of the College of Physicians*, for an interesting case of this kind, vol. iii. p. 577, by Dr. G. Pearson.

† "The spleen may be brought into view by drawing the stomach towards the right side, when the one viscus will follow the other. This organ, like the liver, may be ruptured by violence.

‡ "The pancreas is to be seen by tearing through the great omentum, between the large curve of the stomach and the arch of the colon.

§ "The appearance of the kidneys, although not generally an object of dissection, ought to be noticed, as it is frequently connected with the exhibition of poisons. Like the other solid viscera, too, the kidneys may be ruptured by external violence, and several instances are on record to this effect.

result of disease or of sudden injury. In examining the intestines, Professor Mahon recommends the use of a blunt-pointed bistoury, as this may prevent injury during the dissection. The contents of the stomach and intestines should be analyzed, and those of the gall-bladder and urinary bladder inspected." (P. 73.)

In females, the organs of generation should always be inspected, as very important conclusions may be deduced from the discovery of an unimpregnated uterus. In death from hemorrhage, or from any other cause in childbirth, the appearances that will present themselves are well described by Professor BURNS. Those parts from whose condition or appearance any legitimate deduction can be made, should be preserved. In cases of poisoning, the stomach and intestines, with their contents, should be kept for subsequent experiments.

It will be perceived how essentially necessary an accurate knowledge of anatomy is in such cases, that the appearances which are natural may not be mistaken for extraordinary occurrences, or the effects of disease for those of violence. We would particularly enforce the necessity of perusing with attention the paper of Dr. EBERMAIER upon perforations in the stomach arising from obscure disease.* The appearances that are found upon dissection in such cases, taken in connexion with the sudden occurrence and rapid fatality of the symptoms, have more than once led to the suspicion that poison had been administered. A case of this nature lately happened in France, in which the life of an innocent person was placed in the utmost jeopardy, from the ignorance of the medical witnesses upon this very important subject.

* Vide London Med. and Phys. Journal for October 1828, p. 302; and the succeeding Number, p. 422.

COLLECTANEA.

Floriferis ut apes in saltibus omnia libant,
Omnia nos, iidem, depascimur aurea dicta.

PHYSIOLOGY.

Royal Society.—Observations relating to the Function of Digestion. By A. P. W. PHILIP, M.D. F.R.S. &c.

The author, referring to his former papers, published in the Philosophical Transactions, concludes that digestion requires, for its due performance, both a proper supply of gastric secretion and a certain muscular action in the stomach; the latter circumstance being needful for the expulsion of that portion of food which has been acted upon by the gastric juice. Nervous power is necessary for secretion; but the muscular action of the stomach, being excited by the mechanical stimulus of the contents of that organ, is independent of the nervous power. It had already been shown by the author, that, after the removal of a portion of the eighth pair of nerves, the galvanic influence directed through these nerves will restore the secretion of gastric juice. But Messrs. BRESCHE and H. MILNE EDWARDS have lately endeavoured to prove that the same effect results also from mechanical irritation of the lower portions of the divided nerves. The author points out several circumstances which appear to have been overlooked by these gentlemen, and which he thinks invalidate the conclusions they have deduced from their experiments. He states that a certain quantity of digested food will always be found in the stomach of the animal for five or six hours after the operation, and even after the lapse of ten or twelve hours, from its being less completely changed, and therefore expelled more slowly than in the natural state. The paper concluded with the recital of experiments made for the author by Mr. CUTLER, in which the contents of the stomach of a rabbit, whose eighth pair of nerves, after excision, had been kept mechanically irritated, were compared with those of another rabbit in which the nerves had not been irritated, and of a third which had been left undisturbed. All those who witnessed the result of this experiment, among whom was Mr. BRODIE, were convinced that the irritation of the nerves had no effect whatever in promoting the digestion of the food; neither did it at all contribute to relieve the difficulty of breathing consequent upon the section of the nerves.—*Philos. Mag.*

PATHOLOGY.

Affection of the Heart. Extraordinary Growth.—Dr. BEDOR has lately recorded this singular case: Dr. B. was requested to see a young man whose situation was considered by his medical attendant to be very alarming. The symptoms denoted an organic disease of the heart and great vessels, and he was evidently in a very precarious state. He had been measured three months before, and was then five feet three inches in height. Twenty-five days after, he was again measured, and he had increased in stature full three inches. A few days after the visit of Dr. B. the patient died suddenly. He was scarcely nineteen years of age, and had attained the unusual growth of six feet three inches at the time of his decease.—*La Clinique.*

Malformations of the Heart.—Dr. F. RANSBOTHAM lately presented to the Hunterian Society some specimens of malformation of the heart. In the first instance, both the aorta and pulmonary artery arose from the right ventricle, there being a communication between the ventricles by an orifice in the septum. There was no appearance of lividity in the child, although a mixture of the blood must have existed. The child died suddenly at ten years of age. She was healthy until two years old, when exertion caused some shortness of breathing. She was of a lively and placid disposition. The pulse was rapid and small; the pulsations of the carotids could be distinctly observed. She lay on her back or on the left side, with the legs drawn up to the body, and the back bent to a semicircle. Appetite and general health were good. Her lips and fingers were occasionally of a bluish gray colour. The sensation to the hand applied over the heart was that of sawing, and to the ear that of the purring of a cat. Twelve months ago she became much emaciated. The appetite was greater than natural; the skin dry; the heart laboured in its action; and the respiration was much hurried, and was attended with a short irritating cough, without expectoration. Lips usually pale, but occasionally livid, and she was unable to lie down. During some months the symptoms varied in severity, and at length the face and lower extremities became anasarcons. She expired suddenly about twelve o'clock at night, jumping up as if she had been frightened.

Dissection.—The chest only was permitted to be opened. Half a pint of serum was found in the pericardium, and a pint and a half of bloody serum in the left cavity of the chest. There were a few old adhesions between the pleura on this side. On the right side there were no adhesions, and very little serum. The heart was much gorged with fluid blood, and had the peculiar arrangement of vessels above described.

In the second specimen Dr. R. exhibited, there was no pulmonary artery: its deficiency appeared to be supplied by the bronchial vessels. The aorta, springing from a point between the two ventricles, ran on the right side of the trachea. There were two right bronchial arteries, and one left, all enlarged. The face was very livid. The girl died at sixteen, of tubercular phthisis.

The third was an example of a single heart, one auricle and one ventricle. The heart was turned to the right side, and the ductus arteriosus seemed to supply the place of the pulmonary artery. The pulmonary veins of the left lung terminated in the left subclavian vein; that of the right lung passed through the diaphragm, and terminated in the vena portarum. There appeared an attempt to form a pulmonary artery and vein. The child died when six months old.

Rupture of the Heart; Aneurismal Tumor of that Organ, By Dr. BIGNARDI. (Annali Univ. di Med. Jan. 1829.)

Marianne Prezzi, æt. fifty-eight, of a lymphatic temperament and slender form, had been occasionally subject to diarrhœa. She had otherwise enjoyed good health, when, in February 1828, she complained of a burning sensation in both eyes, which prevented her from working. By appropriate treatment she was relieved in a few days. At the commencement of March she was attacked with fever, and erysipelatous inflammation at the lower part of the neck on the left side. On the 8th, she consulted Dr. B., but refused to submit to bleeding, which he recommended. She was confined to strict diet,

and was ordered mild drinks. On the tenth day, that part of the neck which had been originally the seat of inflammation presented a sort of beating similar to arterial pulsation. No explanation could be given of this unusual phenomenon. The pulsations of the heart were regular, and did not correspond with those of the surface, which were not more than fifty in the minute. By bleeding and emollient applications, these symptoms were relieved, and she resumed her usual occupations.

On the 14th March, she complained of transient sensations of coldness and numbness in both hands, particularly the left. She passed a tranquil night; and on the morning of the 15th, while in the act of making her bed, she suddenly cried out that she had a giddiness of the head, and fell dead upon the spot.

Dissection, fifty hours after death.—The external appearance of the body presented nothing remarkable. The vessels of the brain were empty. The substance of the brain firmer than usual. Lungs very healthy and crepitating. Pericardium enormously distended with a large quantity of blood. The heart was soft and slightly discoloured: at its posterior surface, about one inch from the apex, and a few lines from the right and inferior margin, in a part not covered by fat, was found a longitudinal aperture, penetrating into the cavity of the left ventricle; it was about six lines in length and about half a line in breadth, in the direction of the longitudinal axis of the heart. The edges of the aperture were irregular and lacerated. Towards the left of this opening another fissure was found in a similar direction, covered by the pericardium. The muscular tissue of the heart surrounding both these openings was preternaturally soft. The cavities of the heart contained no blood, and were not perceptibly dilated. The parietes of the left ventricle were somewhat thickened, except at the part where the rupture had occurred. There the muscular tissue appeared to be diminished in its substance; it was soft, pale, yellow, and did not present the fibrous appearance which is natural to it. Examined with a microscope, the torn surface appeared granulated and formed of globules in the midst of a thick serosity. There was no appearance of puriform matter. All the arterial openings were in their natural state. The vena azygos was rather larger than common. The other viscera of the thorax and abdomen were healthy.

Dr. Bignardi is of opinion that the partial or total dilatation of the arteries always results from a softening of their middle coat. He conceives that the rupture which most frequently happens, and which precedes the formation of an aneurismal sac, is invariably consecutive to a morbid alteration of the middle or fibrous coat of the artery. To point out more clearly the analogy which he presumes to exist between such an alteration of the arteries and that which gives rise to rupture of the heart, he relates the following

CASE.—In the winter of 1823, a young person of Modena, named Radichi, died suddenly while dressing herself for a ball. Upon dissection, the pericardium was found greatly distended with blood. Upon attentively examining the heart, there was found at the base of the left ventricle, near the origin of the aorta, a small tumor, the size of a bean. Near this tumor the laceration had taken place, which permitted the effusion of blood into the pericardium, and caused the death of the patient.

Observations relative to the Question, "Is the appearance of the Blood abstracted as a remedial means a just criterion in considering the propriety of repeating the operation of Bloodletting?" By JOHN DAVY, M.D. F.R.S. Physician to the Forces. (*Edinb. Med. and Surg. Journal*, April 1829. Condensed.)

Dr. DAVY first considers the appearances and qualities of the blood, supposed to indicate inflammation, and to warrant rather than forbid further bloodletting. They are, an unusual degree of fluidity of the blood the instant it is drawn; unusual slowness in coagulation, and, when coagulated, being covered with a buffy coat and cupped. These appearances and qualities of the blood are met with in most cases of local inflammation, but with shades, differences, and exceptions, involving much difficulty. When inflammation is violent, rapidly running on to suppuration, extensive, and attacking at the same time one or more textures in different organs, the blood drawn is often neither buffed nor cupped. Dr. D. has witnessed this in peritoneal inflammation, either pure or complicated with inflammation of the mucous coat of the intestines, or with diffuse cellular inflammation. In diffuse cellular inflammation, the blood often coagulates rapidly as in health, and yet, being unusually liquid, exhibits a slight buffy coat, if the vessel is quickly filled and remains unmoved. In ordinary cases of inflammation, as of the pleura and lungs, blood drawn at the commencement of the disease is occasionally not buffed nor cupped. The next day, on repeating the operation, the blood exhibits both these qualities. In inflammation of the mucous coat of the air-passages or alimentary canal, blood drawn may or may not exhibit the appearances and qualities mentioned.

It does not appear that there is any relation in point of degree between these appearances and qualities, and the intensity of the inflammation. Often in fatal cases, fibrinous concretions or polypi, corresponding to the buffy coat in blood drawn, are found in the heart and great vessels, and probably as often when the lancet has been used either freely, moderately, or not at all.

Dr. Davy, therefore, cannot confide in these appearances as indications for practice and the repetition of bloodletting. He concludes they are neither just nor safe criteria.

Dr. D. next considers those appearances of the blood supposed to be connected with a state of the system, as it were, the opposite of inflammation, and not to warrant further bloodletting. They are chiefly, as it is supposed, a very soft crassamentum, very little, if at all, contracted; or the blood remaining liquid, or the proportion of the crassamentum to the serum being unusually small. As far as Dr. Davy can judge, these appearances and qualities of the blood are not proved to be connected with the state of the system supposed. In remittent fever of hot climates, in cholera morbus, both the common and epidemic, the crassamentum is generally softer than natural, and little, if at all, contracted; and yet in these diseases bloodletting is not generally injurious. It is often useful, even if repeated.

Blood without fibrin in any disease is very uncommon. Dr. D. has witnessed it only in pulmonary apoplexy, and that after death in the cavities of the heart and vessels; but so soon after death, that it may be taken for granted it was not a post-mortem change. In such cases, if the patients were robust and plethoric, blood would be taken, it is presumed, without hesitation.

In the advanced stage of acute diseases, or in acute diseases supervening on chronic of long duration, or in persons of delicate habits, the proportion of

crassamentum to the serum is often small. In such cases the lancet would not be used unless it were considered urgently necessary; and, if necessary, the small proportion of crassamentum it might yield would not prevent venesection.

The blood, as far as experience informs us, is not apparently altered in the continued fever of summer, in the early stages of synochus, in apoplexy and tetanus, and many diseases strictly belonging to the neuroses, in the treatment of which bloodletting is often useful, and sometimes necessary. All these considerations tend to support the former conclusion.

It appears to Dr. Davy that, the more experience we have, the less confidence we place in the appearances of the blood, either as to the nature or treatment of disease. Dr. HERBERDEN says, "the more we know of the human body, the more reason we find to believe that the seat of diseases is not to be sought for in the blood, to the sensible qualities of which they seem to have very little relation; and though it be supposed to hold in all maladies, yet in reality it is but in very few that the blood affords the practitioner any useful information." Dr. SCUDAMORE calls this a remarkable passage. Dr. Davy is of opinion that, in the state of knowledge of the blood at the time it was written, the practical conclusion was correct. He fears and believes it is still so, though our knowledge has increased; and that it is so, even more strictly than expressed, even in all diseases, and without the exception of "very few."* Dr. Davy is not aware that there is "any one disease" in which a skilful practitioner feels it necessary to examine the blood, either for the purpose of ascertaining its nature or to direct its treatment. In pneumonia and pleurisy we usually examine the blood. If it is *not* buffed, and the symptoms indicate the necessity of further depletion, we still bleed. Suppose blood abstracted in pulmonary inflammation, supervening on tubercular phthisis, is *strongly buffed*, and the symptoms are little, if at all, mitigated, shall we, on account of the state of the blood, repeat the bloodletting? Probably not. The peculiar state of the patient will rather be considered, and endeavours made to subdue the inflammation by other means.

Case of Delirium Tremens, treated by local Bloodletting and Purgatives previous to the administration of Opium. By A. H. RENTON, M.D. (*Ibid.*)

On the 21st October, 1828, at nine A.M., I was desired to see M. de P—, who, by his son's account, had fainted early in the morning, after a copious evacuation of the bowels, and had since been the subject of frequent fits of convulsions. His general habits are extremely intemperate.

I found the features puffy and bloated; the eye wild and suspicious, and the pupils contracted, and impatient of vivid light. There was general tremor; and the body, but particularly about the face and forehead, was bathed in cold perspiration. The tongue was loaded, tremulous; and the pulse 120, small and compressible. In answering my questions, his manner was agitated, but tolerably coherent. To his wife and the people of the house his conduct was quite outrageous.

On my being about to leave the room, he became suddenly insensible, and

* Mr. Thackrah, who has paid much attention to the subject of the various alterations in the appearances and qualities of the blood in different diseases and conditions of the system, is opposed to this opinion. Vide Thackrah on the Blood, p. 90-97.—EDITORS.

was almost immediately seized with a paroxysm of general convulsion, attended by foaming at the mouth and some degree of stertor, and ending in a state of stupor.

Temporibus statim applicentur Hirudines viginti, et nuchæ vesicatorium amplum. Sumat Calomel. gr. iv., Jalapæ gr. xv.; et vespere, si opus sit, injiciatur Enema domesticum.

22d, ten A.M.—The paroxysms have been less frequent, but the delirium continues unabated. He complains only of headach. The medicine has produced no effect upon the bowels.

Habeat, quam primum, Extracti Cathartici gr. v.; Olei Crotonis gtt. dimidium; et repet. dosis quarta quaque hora, ad quartam vicem, nisi prius supervenerit catharsis.

Six P.M.—The first pill produced copious evacuations; since which there have been no fits, but his manner is wild, and his conduct more extravagant than ever. The surface is cold and moist; the pulse rapid and small.

R Opii puri gr. xij.; Camphoræ ℥i. fiat massa, in pilulas sex dividenda. Sumat unam quarta quaque hora.

23d, eleven A.M.—Four pills have been taken, but there has been no sleep. He is much more quiet, however, and is evidently under the influence of the opium.—Omittantur.

Six P.M.—He has dozed a good deal during the day, and has been much less troublesome. Pupils dilated. His manner is subdued and childlike.

Repet. Pil. Opii hora decubitus, et urgente delirio.

24th.—He has slept during the whole night, and is now perfectly collected. From this time all went on well.

The case seems rather interesting in a practical point of view. It was a well-marked instance of delirium tremens, but combined at its onset with such evident symptoms of cerebral congestion, that, had opium been at first administered, there is reason to suppose that the individual might have been forced into a state of apoplexy, or have become the subject of hopeless organic disease. I met a few months ago, in an Englishman, with a case very similar to the present, in which the same plan of treatment was pursued, and with a similar result. In general, when the head symptoms are not so prominent, on the bowels being thoroughly evacuated by the croton oil, (a medicine of immense value in such cases, and in all others when the object is to have a speedy and complete evacuation of the intestines,) I at once begin with opium.

Inoculation of Hydrophobia.—Some experiments have recently been made at the Veterinary College of Alfort upon this subject. A horse, two dogs, and three sheep, were inoculated with the saliva of a sheep affected with hydrophobia, at various stages of the disease, but no symptom of the malady was produced in the animals thus experimented upon. Four months had elapsed after their inoculation when this report was made.

Ischuria successfully treated by cold Affusions.—A dysenteric patient was affected by constant but ineffectual efforts to void his urine. He was placed in a warm bath, and bled from the arm, but the suppression of urine, which had existed forty-eight hours, was not relieved. Still continuing in the bath, Dr. CAMPBELL directed cold water to be poured in a continued stream over the region of the bladder and pubis. In a short time the urine flowed in a

full stream. The same treatment was continued the four following days. The patient was quickly restored to convalescence.—*North American Med. and Surg. Journal.*

Eruption of Measles appearing only on one side of the Body.—A child, three years old, had been observed never to perspire but on one side of the body. This singular anomaly had for some time ceased to present itself by the use of general bathing. The infant was afterwards attacked with measles, and the eruption only appeared on that side of the body which had before exhibited the greatest degree of vital activity. Recovery from the disease was not interrupted by any untoward symptom.—*Rust's Magazin.*

Case of Aneurism of the Abdominal Aorta. By CHARLES MAYO, Surgeon to the County Hospital in Winchester, &c.

A man, forty-eight years of age, had been subject, for six years, to violent attacks of pain in the back and loins, with numbness of the limbs, turbid urine, &c. These symptoms were more relieved by purgatives than any other remedies. Latterly, he sometimes complained of throbbing at the epigastrium, and for the last three weeks of his life had excruciating pains in the back and left inguinal region, which he compared to boiling lead pouring down the thigh. At this time, too, he kept the body constantly bent on the thighs. Bleeding, leeches, blisters, opiates, &c. were tried without avail, and he died exhausted by pain and irritation.

On examination post mortem, a large tumor was observed between the crura of the diaphragm, and stretching across the spine to the top of each kidney, especially the left. This tumor proved to be an aneurism of the aorta, into which this vessel opened by an aperture at its posterior part, an inch and a half in length, and half an inch in width. The left psoas muscle was softened, and its sheath filled with coagulated blood, extending into the groin. The state of this muscle, and the situation of the tumor, as connected with the kidneys, explain the principal symptoms observed during life.—*Provincial Medical Gazette.*

Case of Bulimia, or Canine Appetite. By Dr. PORTER, of Portsea.—This is a case of diabetes, in which the appetite was increased even to a greater than usual extent. It occurred in the person of a pale emaciated lad, aged nineteen, admitted July 31st, 1826, on board the Ragoon hospital convict ship. His skin was cold, his pulse feeble, and his belly large. At this time he devoured, solid and spoon victuals, twenty-six pounds, eight ounces; drink, twenty-two pounds, twelve ounces; while his excrements amounted to four pounds, eight ounces, and his urine to twenty-eight pounds. He was put on animal diet, and had opium administered in gradually increasing doses, till he took twelve grains daily. Under this treatment the appetite and urine gradually diminished, so that, on the 10th of January, 1827, they stand: food, three pounds, twelve ounces; drink, six pounds, fifteen ounces; the urine having diminished to seven pounds. On the 15th, it is stated that symptoms of pleurisy came on, and he died on the 20th.

On examination after death, the lungs were found highly inflamed, with effusion of lymph and serum. In the abdomen, the only appearance at all

different from usual was, that the stomach and alimentary canal generally were pale and much more capacious than usual; and the same description applies to the kidneys. No disease existed in the brain or spinal marrow.—*Ibid.*

Ossification of the Vitreous Humor.—The eye alone, among the organs of sense, affords examples of ossification. Most frequently it is the choroid membrane which undergoes this change. In cataract, the degree of induration is hardly ever such as to warrant the appellation of bone. HALLER assures us that he has seen the retina ossified, or at least that an ossific lamina occupied the place of this membrane. The same fact is noticed by MORGAGNI, SCARPA, MAGENDIE, and MANOURY. No genuine case of ossification of the vitreous humor has, however, been recorded. LOBSTEIN,* indeed, says that ossifications of the hyatoid membrane are asserted to have occurred, but he appears to doubt the fact, and quotes no authority. SCARPA says that the hyatoid is sometimes opaque and thicker than natural. MORGAGNI speaks of it as occasionally cartilaginous. BEER mentions having found earthy matter in the interior of the vitreous humor, and occupying its place.

M. KREHN has lately met with a decided case of ossification of the vitreous humor. The preparation is placed in the Strasbourg Museum. It occurred in a man, seventy years old, who died of gastritis. The left eye was healthy, but the right presented the following appearances: The globe was evidently diminished in size; it had lost its spheroidal figure, and presented the appearance of four furrows or wrinkles, which corresponded with the insertion of the recti muscles. It was heavy, and felt hard. When a horizontal section was made from behind forwards, the sclerotic was found to be very thick, particularly at its posterior part, near the entrance of the optic nerve; the instrument was soon arrested by a hard body filling the whole space of the eyeball behind the chrystalline lens, and consequently occupying the place of the vitreous humor. Immediately within the sclerotic was the choroid membrane, distinct and rather thicker than natural. The retina was unchanged. The solid body within was marked by the same depression which had been observed externally. It was of a pale white colour, and was internally of a cellular texture, like the cancelli of the long bones. The crystalline was indurated, and of a yellowish white colour. The optic nerve was wasted.—*La Clinique.*

Remarkable Predisposition to Hemorrhage.—Dr. SCHREYER, of Vogtsberg, states that, in a family of five children, under his observation, the eldest bit his tongue, and bled to death; the second and fourth are perfectly healthy; but the third and fifth have a remarkable tendency to hemorrhage. All these are of the male sex. The two above mentioned, one aged five years and the other fifteen months, have, at irregular periods, blue spots on the legs and thighs, which increase till they become as large as a pigeon's egg, when they assume a greenish blue colour: they do not bleed unless they are punctured; but, if this be done, the hemorrhage does not cease till the child faints, and the body is blanched. The blood which flows first is red, but after a time it becomes pale, like water in which flesh has been washed. Pressure with the

* Lobstein's Pathological Anatomy.

point of the finger, kept up for twenty-four hours, is sufficient, according to the testimony of the parents, to stop the bleeding. No coagulum ever forms, to plug up the vessels. Neither of the parents, nor their relatives, participate in this morbid condition; and it is remarkable that it has affected their children alternately, viz. the first, third, and fifth.—*Zeitschr. für Natur. und Heilkunde.*

Habitual Hemorrhage from the Mammæ.—S. A., æt. twenty-four, was admitted into the Königsberg Hospital for this affection. Had been frequently attacked by epistaxis during her infancy; was married at the age of fourteen, the menstrual discharge not appearing until a year afterwards. At sixteen she became pregnant, the menses occurring at the regular interval during the two first months; they then ceased, but reappeared in the sixth and seventh months. She suckled her child (a boy) for two years, the menses appearing, and continuing to recur, from the second month after her delivery. On weaning her child, milk continued to be secreted in large quantity; and although, when the breasts became tense, it flowed from the nipple, yet, for her own comfort and relief from the distress it occasioned, she took the child of a neighbour, and continued to suckle it for a year and a half, and occasionally gave the breast to other children, the quantity of milk secreted was so great. She had now got to a period of four years after her confinement, when a practitioner, who was consulted, undertook to stop the excessive and continued secretion of milk, by repeated abstractions of blood; and this was performed seven times in the course of eight days. The flow of milk, upon this, ceased; but a more serious evil now took place; blood was discharged from both breasts, attended with much pain, and this became almost intolerable when the blood ceased to flow. This state had continued ever since, the blood coming away continually night and day, and also during the menstrual periods, but without affecting her health.

On her admission into the Königsberg hospital, the patient had the appearance of a healthy well-fed woman, with something of a plethoric habit, and, with the exception of the affection for which she was admitted, and the attendant pain, in perfect health. The mammæ, which she stated to have been very large and full whilst the milk was secreted, but to have lost half their size since blood had been discharged, felt soft, and showed no evidence of inflammation. They were, however, extremely sensible to the touch, and she could not bear the pressure of her clothes upon them. From the nipples, which were of natural size and form, there trickled blood, sometimes of a bright red colour, sometimes thin and dark coloured, passing rapidly into putrefaction, and the quantity of which varied from three drachms to an ounce in the twenty-four hours. The blood could not be pressed from the breast as the milk had been. In cold weather especially there was much pain in the breasts, and, when the flow of blood stopped, the pains became intolerable, and extended to the neck and head, shoulders, and arms. She was free from fever, pulse slow and soft, skin dry, evacuations from the bowels and kidneys natural. During the progress of the case, the menses had continued to appear at the regular periods of four weeks, until a short time before the patient's admission, when, for the first time, they did not show themselves; whereupon a vicarious discharge of blood, apparently both from the lungs and stomach, took place.

Dr. JACONSON had the patient ten weeks under his care, during which time various means were resorted to with a view to her relief. Leeches were repeatedly applied to the pudenda, and blood taken from the feet; digitalis, hydrocyanic acid, and alteratives, given internally; the semicupium and pediluvia employed, and a suspensorium mammae applied. No alleviation was, however, obtained, and the difficulties of a cure seemed to be increased from the circumstance of discharge of blood from the lungs and stomach on the third appearance of her menses, (which usually continued eight days,) during her stay in the house. Unfortunately the patient most obstinately refused following the remedial means ordered for her, and she was on this account obliged to be discharged, so that the ultimate event of the case has not been ascertained.—*Rust's Magazin.*

A Case of Exfoliation of the Cuticle. Communicated by THOMAS NEWELL, M.D. Cheltenham, Surgeon Extraordinary to the King.

A young lady, when about twenty years of age, was first attacked with exfoliation of the cuticle from different parts of the body. The cuticle does not appear to undergo any change, nor does the cutis beneath seem to be otherwise altered than becoming inflamed; after which the points of connexion between it and the scarfskin become absorbed, or otherwise detached, so that this last drops off, and may sometimes be drawn from the hand like a glove. The attacks come on about twice a year, generally with considerable constitutional disturbance. Various remedies were tried without apparent benefit; but latterly she has been free from the complaint, since she went through repeated courses of the Cheltenham waters.

A case, of a nature similar to the above, was communicated to the Royal Society in 1769, by Mr. WARNER, of Guy's Hospital.

In the history of this case, it is mentioned that the fever which preceded the separation was of so peculiar a kind, that none of the medical men of great experience knew by what name to characterize it. The patient was very susceptible of alterations in the state of the air, and he had sometimes an attack twice in the course of the year. In this case the nails also separated, being gradually removed by the growth of new ones, a process which took five or six months, long after the skin had acquired a healthy state. This gentleman attributed his attacks to obstructed perspiration; but it seems more probable that this was the effect of the incipient stage of the disease, and not the cause of it.—*Midland Medical Reporter.*

PRACTICAL MEDICINE.

On the Utility of Camphor in Puerperal Mania.—In the *Journal der Praktischen Heilkunde*, November 1828, several cases are related by Professor BERNDT, in which camphor was found very beneficial in this disease. In the cases related there was great sexual propensities, or even positive nymphomania. The evidence of the Professor is very substantial. Before he began the use of camphor, his success was unsatisfactory. In some cases the camphor was used in injections in the quantity of about ten grains, or it was administered internally in doses varying from one to four grains every hour, or less frequently in proportion to the urgency of the symptoms. Dr. Berndt had previously ascertained the inefficacy of the ordinary methods of cure, and

Borax—Consumption—Intermittent Fevers. 557

the danger of narcotic medicines. He therefore resolved to try the effects of camphor, which appears to have been followed by the most favorable results.

Utility of Borax in Diseases of the Skin.—Dr. REINHARDT, of Mulhausen, states that he has cured several herpetic eruptions, of a scaly kind, with a watery solution of borax. He first tried the experiment upon himself. A solution of half a drachm of borax in an ounce of distilled water was applied over the back of both hands, which had been covered with the above species of eruptive disease. At first a sensation of heat and a redness of the part were produced. The lotion was discontinued for some days, and the use of it then resumed. The eruption gradually declined, and it had entirely vanished before the lotion was finished. In three similar cases the same remedy was employed with equal success. In one of these instances, a man, sixty years of age, had been afflicted with the disease for a considerable time.—*Hufeland, Journ. der Prakt. Heilkunde.*

Union of Quinine and Digitalis in Phthisis Pulmonalis.—Dr. GÜNTHER, of Cologne, first recommended these remedies in combination in 1825. He has recorded several cases in which the symptoms were decidedly relieved by this plan. One patient, a scrofulous girl, who was afflicted with tubercular consumption “*au second degré*,” was completely restored to health. Each dose consists of two or three grains of the sulphate of quinine, and from one third to half a grain of powder of digitalis, with eight grains of fennel powder, four times a day.—*Ibid.*

Intermittent Fevers treated by the external Application of the Sulphate of Quinine.—In many cases it is impossible to administer particular medicines internally, either from the difficulty of swallowing them, from their producing vomiting, or from the insurmountable aversion or the tender age of the patient. It may also be added, that the secretions of the stomach very frequently interfere with the operation of remedies. From either of these causes we should be induced to try the endermic method of treatment. Dr. SPERANZA has thus employed the sulphate of quinine in a considerable number of cases of ague. He mentions, among others, fifteen cases of tertian fever, occurring in the spring, which immediately yielded to the quinine, which was placed upon a part denuded of the epidermis by the application of a blister. In each of these instances the fever had lasted many days; without any evident local derangement, excepting in two patients who had some gastric disturbance. Without prescribing any purgative remedies, a blister was first applied, and in most cases on the day of the paroxysm. The quinine was applied at the end of the fit, or at the beginning of the apyrexial period. The arm was usually selected as the most convenient part for the blister. The skin was first rubbed briskly with very strong vinegar, in order to hasten the vesication. Immediately after having raised the epidermis, eight or ten grains of the quinine, mixed up with simple ointment, were placed upon the abraded surface. The part was dressed on the second day, and both the remains of the ointment and the secretions from the surface were removed. About half the quinine was supposed to have been absorbed. By this mode of treatment, the fever at once disappeared in most instances. A second application of the remedy was not necessary.

Not only those fevers of which the type was originally tertian, but those which at first assumed a continued form and then became intermittent, were treated in the same manner with equal success. In no instance was there a relapse, which so frequently occurs after the internal use of the quinine. The application of the blister during the stage of fever produced no irritation of the urinary organs. In some individuals rather more inflammation of the blistered part occurred than is common, and in these instances topical emollients were necessary.—*Annali Universali*.

Extract of a Letter respecting the anti-asthmatic Effects of the Tincture of Lobelia Inflata.

"Having derived great benefit from the use of the tincture of Lobelia inflata, I am induced, in justice to its efficacy, and with the view of giving it publicity, to address you on its curative properties in my particular case. I have, for upwards of two years past, been afflicted with an inveterate asthma, which deprived me of natural rest, and the spasmodic effects of which were frequent and most distressing. When I found these paroxysms coming on, I took fifteen drops of the tincture, which invariably gave me infinite relief, although, previously to my using this remedy, the violent coughing fits often lasted from one to two hours. I should here remark, that I did not discover the virtue of the tincture of the Lobelia inflata until I had tried it about half-a-dozen times, in doses of fifteen drops each. Besides its medicinal virtue, it has, I find, the peculiar soothing quality of exciting expectation without the pain of coughing. For myself, I have not the slightest doubt that, by continuing its use, I shall soon be restored to my wonted good health; and I feel assured that whoever makes trial of this excellent medicine will subscribe to the fidelity of this voluntary testimony of its merits.

"W. B. ANDREWS."

"4, Henrietta street, Brunswick square."

N. B. The tincture is prepared according to the form published in the Medico-Chirurgical Review, by Mr. Snowdon, Haymarket.—*Med. Gazette*.

MATERIA MEDICA.

Adulteration of Sulphate of Quinine.—This valuable medicine has been found adulterated with borax in a large proportion. The fraud is easily detected by throwing some alcohol over the powder, and then inflaming it. The flame will be of a green colour if any borax is combined with it.

SURGERY.

Strangulated Hernia reduced by the external Application of Belladonna. By Dr. MAGLIARI.—A woman, æt. fifty, had been ruptured for several years. When Dr. M. saw the patient, all the symptoms of strangulation were present. They had existed twenty-four hours, and for their relief warm baths, leeches to the anus, poultices upon the tumor, &c. had been used. Castor oil had produced vomiting, which still continued. Dr. M. recommended the application of the following ointment: Lard four drachms, extract of belladonna, ten grains. The symptoms still continuing, the surgeon himself rubbed in the ointment a second time upon the hernial swelling. He used half the quantity above stated. On the following day, the vomiting had ceased; the tumor

was diminished in size, but still the hernia was not completely reduced. The abdominal ring was, however, much dilated, and the intestine was not pressed upon. In a short time the reduction was completed.—*Revue Med.*

Obstinate Cough cured by the Removal of a Portion of elongated Uvula.—A woman had for more than a year been subject to the most violent paroxysms of coughing, which were sometimes so severe as to threaten suffocation. Various remedies had been applied without avail. Dr. PHYSICK examined the mouth, and ascertained that the cough depended upon a morbid elongation of the uvula. A portion of it was removed, and the cough entirely ceased.—*American Journal.*

On Exfoliations from the Bones of the Pelvis, as causing the Obstinacy of Sinuses in this situation. By JAMES SYME, Esq. Surgeon, and Lecturer on Surgery in Edinburgh.

The author of this paper, which appears to us highly interesting in a practical point of view, observes that obstinate sinuses are met with no where so frequently as in the region of the pelvis. Those which remain after the opening of abscesses depending on carious vertebræ, or caries of the hip-joint, are truly incurable, and, being unfortunately of common occurrence, have led to the opinion that little can be done for the remedy of any sinus so situated. The object of Mr. SYME is to show that the sinuses in question sometimes depend not on caries, but on death of bone, which exfoliating in some part of the pelvis far from the surface, causes continued irritation by the presence of the loose portion; whence it is proper, in the treatment of all sinuses in this part of the body not obviously proceeding from caries, to search for such exfoliations, and remove them if they are found to exist. Mr. Syme relates four cases in proof of the accuracy of his opinions, and the benefit of the practice he recommends.

In the first Case, a boy had a small fistulous opening in the upper and back part of the thigh, a little below the tuberosity of the ischium. The complaint commenced without any obvious cause about two years and a half ago, when a tumor, the size of an egg, made its appearance in the seat of the sinus. A surgeon evacuated by incision a great quantity of matter. The opening continued to discharge for a year, when a small bit of bone appeared at the orifice, and was removed. The sinus remained nearly well for six months, when the running again commenced, and continued for about a year. On introducing a probe, Mr. Syme detected a loose piece of bone, which was readily extracted by dilating the opening. The exfoliation appeared to have been detached from a spongy bone, probably the ischium. The boy quickly recovered.

CASE II.—A man, after severe exercise, had pain in the right hip. A collection of matter formed, and was let out by a surgeon. Some large abscesses afterwards formed in the thigh, lower down than the original one, and they were opened. The patient, finding that his complaint, although alleviated, was not cured, determined to leave it to nature. He permitted the disease to take its course for several years, occasionally working at his business as a cooper, when not suffering severely from pain. About two months before Mr. Syme saw him, he had again applied to a surgeon, by whom a piece of bone was removed, which was found sticking at the orifice of a sinus. It

was ascertained that there was more bone to come away, and attempts were made to dilate the opening by sponge tent, which much aggravated the sufferings of the patient. He now applied to Mr. Syme, who found a large diffused abscess occupying the upper and back part of the thigh, and extending from the hip half-way to the knee. In the fold which lies between the hip and thigh, there was an opening which allowed the probe to enter fully three inches in the direction of the tuberosity of the ischium, and at the bottom of this passage a loose piece of bone was felt. The man was now pale, emaciated, and desponding. Mr. S. opened the abscess, and let out several ounces of pus. On the following day the sinus was dilated to the bottom, so as to admit a finger, and it was found that the exfoliation lay in a cavity between the origins of the flexor muscles of the knee. The mouth of this cavity was dilated, and a piece of bone, about half the size of a sixpence, was easily extracted. In the course of two or three days the patient walked a mile, and at the end of two or three weeks he was able to resume his occupation. Some months afterwards another small piece of bone was removed, and the man remained free from complaint.

Two similar cases are related by Mr. Syme, which illustrate the same pathological principle, and good effects of his practice.

Mr. S. trusts that the history of these cases will excite a more discriminating diagnosis and active treatment of sinuses of the pelvis. It is not his intention to dwell at any length at present upon the origin of the exfoliations. It appears evident, he remarks, that they cannot result from the direct effects of violence; since, in all the cases detailed, the bone concerned was securely protected by its situation from any such injury. In all of them, except the first, where no information could be obtained as to the origin of the complaint, there was violent muscular contraction; and Mr. S. is inclined to think that this was the exciting cause of inflammation and death of the bone. The subject is curious and worthy of investigation, but of little importance when compared with the practical benefit which may result from a knowledge of the fact that sinuses of the pelvis sometimes depend on loose exfoliations, which will not find their way out unassisted, but which may be readily removed artificially, with the effect of a speedy and perfect cure.—*Edinburgh Med. and Surg. Journal*, April.

Case of Strangulated Hernia, in which six Inches of the Intestine were removed.
By JOHN SIMPSON, M.D. Bath.

A man, about sixty years of age, had long been troubled with a large inguinal hernia, which had frequently descended into the scrotum. In the year 1816, four days before Dr. SIMPSON was sent for, it had come down, and could not be replaced; it then became strangulated. Various and judicious measures had been adopted by a gentleman in his neighbourhood, but it became necessary to perform an operation. On opening the sac, a large quantity of fluid escaped; omentum and intestine were contained in it, and both were in a state of mortification. The stricture, which was at the inner ring, was divided, and great relief thus given; but the parts were glued together by old adhesions, owing to which the bowel could not be returned. Next day, the symptoms continuing urgent, an incision was made along the protruded intestine, when a very large quantity of black feculent matter was discharged. The following day he was better; and the omentum, and six or seven inches

of intestine, supposed to be ileum, were removed with the knife: very little bleeding occurred. A pad was applied over the upper part of the wound, which was removed occasionally, so as to empty the bowels. In about three weeks some feces passed per rectum, and in a few months the artificial anus entirely healed. Four years after he was alive and well.—*Midland Medical Reporter*.

Chlorides of Soda and Lime in Sloughing Sores. (From "Cases illustrative of the beneficial Effects of the Chlorurets of the Oxides of Sodium, and of Calcium, of the Chevalier LABARRAQUE, of Paris. By J. G. F. HASSELL, M.D. late of the British Army.")

In January, 1827, a young woman, named Josephine, aged twenty-five, of a sanguine temperament, was admitted into the Boulogne Civil and Military Hospital, which is superintended by two experienced medical practitioners, namely, Messrs. GORÉE and ROUXEL, both doctors of medicine and surgery. This patient was afflicted with a sarcomatous tumor, the size of a large orange, situated on the inside of her left thigh. Dr. Gorée proposed the removal of this tumor by a surgical operation, to which the patient not submitting, she was soon discharged.

A few weeks after having quitted the hospital, she received, by accident, a blow on this tumor, with which she had been afflicted for upwards of a year. After this accidental excitement, the tumor inflamed violently, so much so that the swelling extended over the whole thigh and knee, causing great muscular contraction and deformity of the limb. This induced the patient to apply for readmission into the hospital, where she was again received in the beginning of March. Independent of a proper medical treatment, the tumor was poulticed for several days, a fer which suppuration took place: a dark-coloured fetid matter escaped through a small aperture on the lower part of the tumor, about two inches on the inside above the knee; but this natural opening (caused by an increased action in these parts) soon degenerated into a malignant and sloughing ulcer, which made a rapid progress both in the adjacent integuments and deep-seated muscles.

On the 12th of March, Dr. Gorée made a large longitudinal incision through the diseased integuments and fascia, out of which more than two pounds of fetid matter were discharged. The smell of this corrupted ulcer was the most offensive that I ever experienced in practice. The cavity of the wound presented a most frightful and alarming aspect. It was fomented with a mixture of one part of the chloruret of sodium* and twelve parts of tepid water, by which the putrid smell was subdued in a few seconds, to the great surprise of the attendants and patients present in the sick ward. The whole cavity of this enormous wound was filled up with fine dry soft French lint, over which two or three ounces of the concentrated chloruret of sodium were sprinkled; a large thick compress and bandage completed the dressing, which was saturated with the diluted mixture of the chloruret in the proportions as above mentioned. On the following morning the offensive odour of the wound was considerably lessened, and a vast deal of fetid matter was again discharged. To the dressing adhered not only the sloughy integuments, but also a large mass of disorganized cellular substance, muscular fibres, and veins, which came

* The chloruret of the oxide of sodium of the French chemists is the chloride of soda of the British.—EDITORS.

away without much resistance, by hooking it out with the assistance of the finger. This corrupted fleshy mass weighed upwards of a pound. The wound was then treated as before, and the same plan was pursued for several successive days until the fetid matter was discharged, and the putrid smell entirely subdued. By this treatment the wound was converted into a simple and healthy one about the 18th of March; a rapid and healthy granulation soon filled up its extensive cavities; the patient's exhausted frame was likewise gradually recruited; and, by paying attention to the digestive organs, and prescribing a light but nourishing diet, she soon recovered her strength and general health.

Dr. HASSELL relates another case, that of a gentleman, of full habit, aged sixty, whose constitution had been much impaired by luxury, and who had a very painful carbuncle in his neck, which a practitioner had mistaken for a common boil, and directed to be poulticed. The Doctor was consulted, and found seven or eight sinuses in the carbuncle, "through which a dark yellow, greenish, bloody, and irritating ichor issued:" in less than twenty-four hours afterwards, the inflammation had extended upwards to the occiput, and downwards over all the cervical vertebræ and both scapulæ; an extensive sloughing of the integuments followed. The patient being in imminent danger, Dr. H. made several deep incisions through the integuments; and, after a considerable quantity of dark blood and fetid matter had escaped, fomented the parts with equal proportions of the infusion of poppies and Labarraque's liquid. The wounds were filled up with lint dipped in the same. A mixture and an opiate draught, containing also fifteen drops of the liquid, were given the patient. The next day the gangrenous parts came away with the dressings; and, these being five or six times renewed, a few emollient poultices completed the cure.

M. DUPUYTREN'S *Treatment of Spots on the Cornea*.—Patients have flocked to the Hôtel Dieu for some years for the treatment of spots on the cornea, as formerly under DESAULT, for that of chronic ophthalmia of a scrofulous or other nature.

The treatment employed by M. Dupuytren is as follows:

A bleeding, if there be violent irritation. Leeches to the temples, if this irritation is less. Afterwards one or two mild purgatives, two or three days intervening between each. After which a seton made of cotton threads, united in a cylinder, and some inches in extent, is introduced under the skin at the back of the neck. In fine, the insufflation, or blowing into the eye or eyes, with the barrel of a quill, (the eyelids being separated,) a pinch of an impalpable powder, composed of R_x Oxyd. Zinci impur., Sacchari Crystal., Hydr. Submuriatis, aa partes æquales. Misce, fiat pulv. subtilissim. The size of the pinch may vary, and the insufflation should be repeated night and morning. The patients ought neither to wash nor dry their eyes after it.

When there is no disease on the eyelids, no inflammation, no irritation of the conjunctiva, the insufflation of the above powder generally suffices to remove the spots. Those which are recent and slight are completely dissipated in a few weeks by this treatment. The thicker and larger patches are ordinarily cured in a month or six weeks; and very frequently patches which occupy nearly the whole of the cornea, and completely cover the pupil, entirely intercepting the passage of light into the eye, disappear entirely in a few months.

—*Ratier's Medical Guide to Paris.*

M. DUPUYTREN'S Treatment of Phagedenic and Corroding Herpes.—There is no physician who has not had an opportunity of observing and treating phagedenic or corroding herpes, and experienced a disagreeable proof of the inefficacy of the anti-herpetic, anti-scorfulous, anti-venereal remedies, and others, which have been tried by turns against this cruel disease, according to its different appearances and its supposed nature. We know that, in spite of all the remedies, the phagedenic herpes eats and destroys the nose, the lips, the cheeks, the eyelids, the ears, the temples; parts which it more especially and frequently attacks. Fire itself seems to irritate, as well as arsenical paste: these agents have, besides, the inconvenience of destroying the parts on which they are applied, and to add to their deformity. These motives have for a long time induced M. Dupuytren to seek other remedies against phagedenic herpes, and it seems certain that they may be cured without deformity, by the use of the following powder:

R Hydrag. Submur. præcip. partes	199
Oxidi Arsenici albi, vel } partem.....	1
Acidi Arseniosi	
	200

This remedy, which acts rather as a specific than as a caustic, may be variously employed. If the surface of the herpes is ulcerated, moist and cleaned, it is powdered with a little puff, charged with the above-described powder, so as to cover it with a thick layer of about the twentieth part of an inch. If this surface is covered with a scab, it must be thrown off by means of a poultice, and then it is dusted as has been just described. In fine, if the herpes is actually covered with an imperfect cicatrix, it must be destroyed; twenty-four hours after, the surface is dusted, when it must necessarily have ceased bleeding.—*Ibid.*

MIDWIFERY.

Expulsion of the Placenta four Months after Delivery.—A woman was delivered in January of a dead child, in which putrefaction had commenced in different parts of the body. The midwife made many useless efforts to extract the placenta: she pulled so hard, indeed, by the funis as to break it off. The placenta still remained in the uterus. The cervix uteri closed, and neither uterine pains nor any discharge indicated the probability of the expulsion of the afterbirth. The woman enjoyed a perfect state of health till the following May: slight pains and a sanguineous discharge then appeared. These symptoms lasted but a short time, and again returned. They were now more severe, and were followed by the expulsion of the placenta, the presence of which in the uterus, during so long a period, had been productive of no inconvenience.—*Gemein Deutsche Zeitschr. für Geburtskunde.*

Pregnancy, with Cancer of the Cervix Uteri.—Dr. LAUBREIS, a practitioner in Bavaria, has related two cases of this nature: the first proves that conception may take place, if the full term of utero-gestation be completed, notwithstanding the presence of carcinoma of the neck of the uterus, provided it be not far advanced. In the second case, the scirrhus was far in the ulcerative stage before impregnation took place, and the woman miscarried at the end of the third month, and died, by which an opportunity was afforded of examining the parts.—*Journal für Geburtshülfe, &c.*

CHEMISTRY.

Method of detecting Arsenic in Sulphur.—MM. GEIGER and REIMANN say that the presence of arsenic in sulphur, to the amount only of 0.000061, may be discovered in the following manner: A certain quantity of precipitated sulphur, flowers of sulphur, or ordinary sulphur finely pulverised, is to be digested with ammonia for a considerable time, then filtered, and afterwards the clear liquid acted upon by excess of muriatic acid. If a yellow precipitate occurs, it is an indication of the presence of arsenic; if not, the liquid is to be evaporated until only a few drops remain. A little ammonia is then to be added; afterwards a small quantity of muriatic acid; and, finally, a little solution of sulphuretted hydrogen. If there be the smallest quantity of arsenic, it will be rendered evident by a yellow precipitate.—*Bull. Univ. (Quarterly Journal of Science.)*

MISCELLANEOUS.

On Feigned Diseases of the Heart. By Dr. QUARRIE.—A man, named Chapman, became notorious in the Royal Marine Artillery for possessing powders capable of producing symptoms so closely resembling those of diseased heart, as to deceive the medical attendants, and lead to the men procuring exemption from duty. These powders, it appears, consisted chiefly of the Helleborus albus; and the drug was actually administered in the immense doses of one drachm or more, when it was intended to produce a very decided effect.—*Provincial Medical Gazette.*

 INTELLIGENCE.

MONTHLY REPORT OF PREVALENT DISEASES.

WE are not aware that any striking peculiarity has marked the diseases which have most prevailed since our last report. Scarlatina, measles, and whooping-cough still continue frequent, but are now less severe than they were during the month of April. We have seen one case of scarlatina, the progress and symptoms of which were somewhat unusual, and in which also the patient recovered under circumstances which seemed to justify an unfavorable prognosis.

A young lady, aged sixteen, was exposed to cold about ten days after the desquamation of the cuticle, subsequent to the eruption. She was at this time rapidly recovering her general health, which had been much subdued by the severe though short disease she had passed through. In a few hours after, she complained of having "caught cold," and of feeling an uncomfortable stiffness of the neck, headach, and slight feverish symptoms. The next morning, the whole of the anterior part of the throat was highly inflamed, particularly the integuments over the lower part of the left sterno-cleido-mastoidens muscle. The patient appeared dull and heavy, and towards evening she became nearly comatose. She was roused even by a loud noise but for a moment, and the only expression of complaint that could be drawn from her was that her hands and legs were very painful. They were slightly anasar- cous, as was also the face. In this state she remained for three or four days,

and it was concluded from the symptoms that effusion had taken place into the ventricles of the brain, and a guardedly unfavorable prognosis was given. A well-defined phlegmonous abscess had in the mean time formed nearly over the thyroid cartilage, which was opened on the fifth day from the first appearance of the external inflammation, and about four ounces of well-conditioned pus was discharged. From this time the symptoms of cerebral oppression gradually subsided, and the patient slowly recovered. The treatment adopted upon the first appearance of the comatose symptoms consisted of active purgatives, cold evaporating lotions constantly applied to the shaven scalp, a blister between the shoulders, and pills of squill, digitalis, and calomel. The general condition of the patient appeared to contraindicate the abstraction of blood.

In all cases of a similar kind which terminate favorably, it is impossible to determine positively that effusion had taken place in the ventricles of the brain. In the above instance the presumption is certainly strong in favor of such a supposition, both from the symptoms of cerebral oppression and the general anasarca which existed. We will not venture to assert that the cessation of the symptoms of cerebral affection depended upon the discharge of the matter from the abscess in the throat. The coincidence was, however, remarkable. Much diversity of opinion has existed as to the causes which especially favor the occurrence of anasarca after scarlatina. We believe it is universally admitted that it is usually the sequel of mild cases of the disease. In the case above related, there can be no doubt that exposure to cold was the exciting cause of the dropsical effusion, and, as far as our own observation goes, this is generally the case. The fact is undeniable that dropsy more frequently succeeds to scarlatina in cold than in hot or temperate climates, and in winter more often than at other seasons.

Distribution of Prizes at the London University. Saturday, May 23d.

The MARQUIS of LANSDOWNE in the chair.

An adjudication of prizes and certificates of honour took place in acknowledgment of talent and industry in the various branches of medical science. Every precaution had been adopted to secure the utmost impartiality in the distribution of the prizes to the young candidates. The honours and prizes were awarded by the result of answers in writing to prepared questions. A series of questions for the students of each professor was printed, of which a copy was delivered to the student after he came into the examination-room. The answers were written in the examination-room, and subsequently collected at one time. No book whatever was allowed to be brought into the room. The paper containing the answers was signed with a mark or motto, and the name of the student using it enclosed in a sealed envelope, inscribed with the mark or motto, was left with the warden, to be opened upon the day of the distribution of the prizes. In each class a gold medal and two silver medals were given, and certificates of honours to all who had attained a certain amount of excellence in their replies to the various questions. Upon the present occasion, the professors in succession read the motto affixed to the paper of answers which had been deemed the most meritorious, and to which consequently the gold medal had been awarded. The sealed packet was then opened by the warden, and the name of the successful competitor declared, who then presented himself to the noble chairman, by whom the

certificate and prize were given. The professor next announced the mottos to which the silver medals had been awarded; and afterwards the names of the pupils were read who had obtained certificates of honours. The same student was allowed to be a competitor for a prize or certificate in every class.

Mr. GEORGE ATKINSON, of Sheffield, obtained three gold medals, for physiology, medical practice, and midwifery; and the second silver medal for *materia medica*. To the honour of Mr. Atkinson, it should be stated that it was the first year of his attendance at any medical school.

Mr. BENJAMIN PHILLIPS, of Newport, obtained two gold medals, for surgery and practical anatomy; and the first silver medal in another class, and the second silver medal for physiology.

Mr. ROBERT GARDNER, of Staffordshire Potteries, received the gold medal for *materia medica*; the first silver medal for physiology; and the second silver medal for surgery.

Mr. JOHN JONES, of Kidderminster, the gold medal for anatomy, and the second silver medal for practical anatomy.

Count CANARES, eldest son of the Marquis PALMELLA, the gold medal for chemistry.

Mr. FREDERICK DUCKHAM, of Falmouth, the first silver medal for *materia medica*; the first silver medal for practical anatomy; and the second silver medal for anatomy.

Mr. T. H. CONNOR, of London, the first silver medal for surgery.

Mr. W. M. RICHARDS, of Norwood, Surrey, the first silver medal for the practice of medicine.

Mr. ALFRED WAREHOUSE, of Halifax, the first silver medal for midwifery.

Mr. E. J. QUEKETT, of Langport, the first silver medal for chemistry.

In addition to the above prizes, Professors BENNETT and THOMSON presented some books to those pupils who deserved some mark of public approbation and the esteem of their teachers, although they had not succeeded in obtaining the gold or silver medal.

We believe it is intended to publish the lists of questions which were submitted to the candidates by the various professors. We have seen the questions submitted by Professor Thomson on *materia medica*. The extent of information that must be possessed by those pupils who correctly answered the majority of them must have been very great.

The whole of the ceremony was highly gratifying, and no doubt can be entertained of the great advantages that will be obtained from the stimulus to exertion that will be secured on the part of the pupils by these public avowals of their merit. With the most sincere wishes for the future welfare and professional reputation of these youthful aspirants for honour and fame, we will conclude by urging them to remember the axiom of the talented Dr. YOUNG, whose recent loss we have to deplore, that in every study "system is the Ariadnean thread, without which all is confusion."

Lectures on Medical and General Botany, by Mr. GILBERT BURNETT, Theatre of Anatomy, Great Windmill street.

The general principles of botany, with the relations and purposes of the science, will be treated in the following order:

1. The natural philosophy of organization, with the comparative anatomy and physiology of vegetables.

2. The systematic arrangement or classification of plants, with reference more especially to the celebrated methods of Rayo, Linnæus, and Jussieu.

3. The products and properties of vegetables, both medical and economical. In this section the distinguishing characteristics of the most valuable and important plants will be pointed out; the officinal and poisonous species particularly described; and the descriptions illustrated by specimens and plates.

These lectures commenced on Tuesday, May 5th, at half-past six P.M. and will be continued every Thursday, Saturday, and Tuesday, at the same hour, until completed.

Guy's Hospital. Vase presented to BRANSBY COOPER, Esq. by his Pupils, April 27th.

The pupils of Guy's Hospital presented Mr. BRANSBY COOPER with a magnificent silver vase, which cost 95*l*. Mr. CHARLES GAZELEE was deputed by his fellow-students to express their sentiments on the occasion, which he did in the presence of the pupils and many members of the profession, assembled in the theatre to witness the ceremony. He addressed Mr. Cooper as follows:

"Sir: The gentlemen whose names are recorded on this scroll have deputed me to offer you their sincere congratulations on the success which attended your prosecution of the editor of the *Lancet*, for one of the most unjust and deliberate libels that ever issued from the press.

"We are, sir, well aware that, anxious as you must have been to wipe off the imputation from your character, you were not so much actuated by a feeling of personal consideration, as by a wish to support the respectability and dignity of the profession; and we look upon yours as a signal triumph of principle and justice over a most odious system of misrepresentation and deduction.

"So many are the difficulties with which the healing art is beset, and so constantly are the best and most experienced judgments liable to be deceived, that no profession affords so wide a scope for a designing mind to scatter its illiberal reflections, with a more specious pretext of plausibility; while none has a higher claim on that virtuous charity which would bid us extenuate rather than blazen forth the misfortunes of others. Nay, sir, where is the man who will dare to say that he never committed an error? 'Let him that is without fault cast the first stone.' But, when even the truth is misrepresented, what character, however eminent, is secure? To be traduced by tongues which, though they have not the candour to speak the truth, yet will be the chronicles of men's doings:

" 'Tis but the fate of place, and the rough brake
That virtue must go through. We must not stint
Our necessary actions, in the fear
To cope malicious censurers.'

"That the recreant defamer who has once quaffed the chalice of slander can never be again so well satiated as by revelling in the lifeblood of some murdered reputation, is not very surprising; but such a system calls loudly for correction. Under a mistaken and misnamed form of 'liberality,' it is calculated to rear up distrust instead of confidence, dissention instead of unanimity, discord instead of harmony, enmity instead of friendship; it would break the bonds of private endearment, and unknit every social tie.

"It is, sir, in acknowledgment of the generous spirit which impelled you to come forward at such a crisis, when the feelings of a whole profession had been outraged by a deeply practised slanderer, and in acknowledgment of the success which crowned your exertions, that we would now offer our tribute; and, as a more lasting pledge of our unalienated good opinion, and of the sincerity of our congratulations, I beg leave, in the names of my fellow-students, to request your acceptance of this vase, which bears an inscription expressive of the object for which it was presented:

To BRANSBY BLAKE COOPER, Esq.

The Pupils of Guy's Hospital
present this Vase,

To testify their ardent participation in his Triumph
over a daring and malicious Libel.

1829.

"I trust, sir, that you will overlook the imperfect manner in which the humble individual who has the honour to present it now discharges the office with which his fellow-pupils have intrusted him. I am sure that I need not appeal to your class for permission to thank you for the zeal which, in common with the other professors of this school, you evince in the discharge of the duties connected with it, and by which you maintain with credit the same established by your distinguished predecessors."

Mr. Cooper replied nearly in the following terms:

"Gentlemen: I have often had occasion to express my sense of your approbation and kindness. At present I can find no language adequate to convey to you the feelings I experience upon this further testimony of your approbation, and of the very flattering terms of your address to me.

"Whatever pain and mortification I may have suffered from the attacks of malevolence and envy, I can assure you I have found an ample compensation for those sufferings in the opportunity they have given me of learning your sentiments, and the estimation in which I have the honour to be held by those who are most intimately acquainted with my professional acquirements and my private character.

"Gentlemen, you have done me no more than justice in ascribing the efforts I have made to vindicate myself from the attacks in question more to a sense of what was due to the honour of my profession, than to any personal feeling or interest of my own.

"I am vain enough to think that no person acquainted with me, or with the progress of my professional career, could have been influenced by the libels otherwise than by feelings of contempt for the author. With regard to those to whom I was unknown, I was well aware there was more risk than advantage in bringing my name before the public in connexion with the revolting detail of a surgical operation, liable to be misunderstood by the ignorant, and easily misrepresented by the malicious.

"But I felt, as I am glad to find you feel, that the honour and character of the medical profession itself were attacked, and its utility as a liberal profession diminished by the system of slander which had been too long allowed to pass unnoticed; and I resolved, at whatever hazard to myself, to seize the occasion which was given me of appealing to the laws of my country, and of exposing to the public the mischievous, base, and sordid means which were employed to depreciate and defame the profession to which I belong.

"Gentlemen, I beg you to accept my heartfelt thanks for your splendid

gift, which is to me inestimable. I shall preserve and cherish it as a testimony of your kindness and good opinion, the possession of which must ever be an ornament in prosperity, a consolation in adversity. I shall make it my study to cultivate and deserve your good opinion; and I shall transmit this splendid vase to my children, that in aftertimes they may judge from this pledge how their father was estimated by his pupils."

Dr. C. J. ROBERTS has been elected one of the physicians to the General Dispensary, Aldersgate street; Dr. WOODFORD having resigned.

LITERARY NOTICE.

Dr. KENNEDY has in forward preparation for the press a work which will form three volumes 8vo. entitled "A History of the Medical Sciences, Biographical and Philosophical; containing an Account of the Persons and Writings that have conduced to the Improvement of Physic, from its Origin in Britain to the end of the Eighteenth Century.

MONTHLY LIST OF MEDICAL BOOKS.

[Medical Works cannot be entered on this List except a copy be sent for the purpose; the titles of Books having frequently been transmitted to us, as published, which have not appeared for weeks, or even months, after.]

Medical Botany; or Illustrations and Descriptions of the Medicinal Plants. By JOHN STEPHENSON, M.D. F.L.S. and J. M. CHURCHILL, F.L.S. &c.—Published by Tilt, Fleet street.

These Numbers of this excellent and very useful work deserve the same degree of approbation which we have bestowed upon the preceding parts. The two plates of the Aloes are particularly valuable. The Aloe Vulgaris, of which the plate is given in No. 27, has appeared, we believe, in no other work excepting SIBTHORP'S Fl. Græca, the price of which is fifty guineas, and of which seven copies only have been published. The Aloe Socotrina has been taken from a living specimen which blossomed this spring. The plate of Ergot is also valuable, and well executed. The account of the poisonous and medical effects of this now important remedy is highly interesting and instructive. Several other plates are contained in these Numbers, together with correct descriptions of them in the text.

Medical Report of the House of Recovery and Fever Hospital, Cork street, Dublin, for the year 1827. By JOHN O'REARDON, M.D. &c.—Dublin.

An interesting and practical document, from which we shall select extracts.

A Practical Dissertation on the Waters of Leamington Spa; including the History of the Springs; a new Analysis of their gaseous and solid Contents; the Rules for drinking the Waters, Bathing, Diet of the Patients, and other Regimen. By CHARLES LOUDON, M.D.—8vo. 1828.

The author of this Dissertation has very satisfactorily effected the object he has had in view, of giving the profession a monograph to refer to, that they may be able to judge of the nature of the mineral springs at Leamington, and of the various ways in which they are used.

Twenty-fourth Annual Report of the London Ophthalmic Infirmary for curing Diseases of the Eye, founded by J. C. SAUNDERS.—London, 1829.

The committee of this well-known Infirmary made two very gratifying statements on the twenty-fifth anniversary of the institution: the funds are much improved, and the number of patients relieved greatly increased.

Elements of Medical Statistics; containing the Substance of the Gulstonian Lectures delivered at the Royal College of Physicians; with numerous Additions, illustrative of the Comparative Salubrity, Longevity, Mortality, and Prevalence of Diseases in the principal Countries and Cities of the Civilized World. By F. BISSETT HAWKINS, M.D. of Exeter College, Oxford, &c.—8vo. pp. 234. Longman and Co. London.

Observations on the Phrenological Development of Burke, Hare, and other atrocious Murderers; Measurements of the Heads of the most notorious Thieves in various Prisons. Presenting an extensive series of Facts, subversive of Phrenology. Read before the Royal Medical Society of Edinburgh. By THOMAS STONE, Esq. President of the Royal Medical Society.—8vo. pp. 75. 1829.

METEOROLOGICAL JOURNAL,

By Messrs. HARRIS and Co. Mathematical Instrument Makers, 50, High Holborn.

April	Rain gauge.	Moon.	Thermom.			Barometer.		De Luc's Hygrom.		Winds.		Atmospheric Variations.		
			9 A.M.	MAX.	MID.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 A.M.	10 P.M.	9 a.m.	2 p.m.	10 p.m.
20	.16		49	56	40	29.57	29.71	57	52	WNW	WNW	Cloudy	Fine	Fine
21			47	53	45	.68	.53	53	60	WSW	E	Foggy	Fine	Cloudy
22			46	55	44	.29	.30	62	61	E	ENE	Rain	Rain	Show'ry
23	.34		50	55	45	.54	.59	61	65	ENE	ESE	Foggy	Fine	Fine
24			49	60	40	.59	.69	67	68	E	NE	Foggy	Rain	Cloudy
25			40	50	38	.62	.79	70	73	ENE	NE	Rain	Rain	Fine
26	.35		42	51	35	.73	.64	65	62	ENE	ENE	Fine	Fine	Fine
27			43	51	43	.61	.60	62	57	WSW	NNW	Show'ry	Fine	Show'ry
28			47	51	39	.57	.25	57	56	W	NW	Cloudy	Rain	Fine
29	.12		46	50	35	.61	.67	50	52	NW	N	Fine	Fine	Fine
30			42	52	38	.73	.64	52	53	NW	NNW	Fine	Fine	Show'ry
May 1			47	57	48	.57	.60	55	53	WNW	W	Cloudy	Fine	Fine
2			53	60	46	.60	.63	50	52	W	WSW	Fine	Fine	Fine
3			53	60	47	.67	.69	53	55	W	W	Fine	Cloudy	Cloudy
4			56	60	47	.72	.90	55	50	W	W	Fine	Fine	Fine
5			59	61	54	.95	.92	50	53	SW	WSW	Fine	Cloudy	Cloudy
6			57	62	46	.86	.91	55	52	SW	WSW	Rain	Fine	Fine
7			53	63	46	.90	.97	52	53	W	WNW	Show'ry	Rain	Fine
8			51	62	50	30.07	30.06	53	50	W	W	Fine	Fine	Fine
9			57	63	52	.06	29.98	50	50	W	NW	—	—	—
10			58	68	50	29.94	.92	48	48	SE	SE	—	—	—
11			60	63	53	.93	.91	47	49	ESE	E	—	—	—
12			61	65	47	.87	.85	49	45	E	E	—	—	—
13			59	64	50	.86	.88	45	45	E	ESE	—	—	—
14			60	67	54	.88	.88	45	45	S	WSW	—	—	—
15			60	66	51	.89	.90	45	50	WSW	ESE	—	—	—
16			56	69	47	.99	.99	50	50	E	E	Cloudy	Fine	Fine
17			52	63	49	.99	.95	48	46	ENE	ENE	Fine	—	—
18			53	62	46	.96	.89	45	46	ESE	E	—	—	—
19			54	66	48	.83	.80	46	44	E	E	—	—	—

The quantity of Rain fallen in the month of April, was 3 inches and 79-100ths.

NOTICES.

Anonymous reviews of books, whether favorable or unfavorable, can never be admitted into this Journal. The Editors must also take the liberty of observing, that the attempt to procure the publication of such articles is not creditable to the writers of them.

Mr. BROUGHTON's Communication has been received.

ERRATUM in the last Number. The last line in p. 442 to be at the top of p. 439.

INDEX

TO THE

SIXTH VOLUME OF THE NEW SERIES

OF THE

London Medical and Physical Journal.

	PAGE		PAGE
ABDOMEN, wounds of, for the purpose of suicide . . .	423	Aorta, case of contraction of, in which the vessel was nearly impervious . . .	240
Abortion, Dr. Granville's work on, 280		—, aneurism of abdominal . . .	553
Abscesses, chronic, in the female breast . . .	327	—, descendens, rupture of . . .	290
Acupuncture in India . . .	171	Apoplexy, disposition to, in old age . . .	257
Affidavits, false, made at Apothecaries' Hall . . .	279	—, case of pulmonary . . .	359
Ague treated by external use of Quinine . . .	557	Apothecaries, regulations of the . . .	469
Alum, use of, in Colica Pictonum . . .	95	—, Hall, false affidavits made at, by students . . .	279
Ammonia, Acetate of, in uterine diseases . . .	270	Arabian mode of treating fractures . . .	175
Amputation, superiority of making one incision through the integuments and muscles, in . . .	80	Arsenic in sulphur, method of detecting . . .	564
Anatomy, analysis of Dr. Craigie's Elements of General and Pathological . . .	243	Ash, Dr. death of . . .	473
—, Mr. Tuson's Compendium of . . .	472	Asthma, on the use of the Lobelia Inflata in . . .	558
—, Mr. Guthrie's Letter to the Secretary of State, containing remarks on the Report of the Select Committee of the House of Commons on . . .	260	Axillary aneurism, case of, caused by reduction of luxated humerus, 314	
Aneurism of the abdominal aorta, 353		Bath, Dr. Ridgway on the origin of the Vapour . . .	215
—, axillary, case of, caused by reduction of a luxated humerus . . .	314	Belladonna externally applied, and reducing strangulated hernia . . .	558
—, Dupuytren's case of femoral . . .	173	Blistering never serviceable in mania . . .	74
—, of the carotid, cured by Valsalva's plan . . .	273	Blisters injurious in delirium tremens . . .	15
—, spontaneous cure of femoral, aided by pressure . . .	413	Blood, fluidity of, after death . . .	466
Angina pectoris without organic affection of heart or large vessels . . .	353	—, appearances of, how far they show necessity for bleeding . . .	550
Animal Magnetism, Mr. Chenevix on . . .	219, 491	—, experiments on the velocity of the circulatory motion of the . . .	357
No. 364.—No. 36, New Series.		Bloodletting in insanity, Dr. Burrows on . . .	69
		Borax useful in diseases of the skin . . .	557

	PAGE		PAGE
Bonaparte, opinion of a French physician as to the death of . . .	354	Chest, wounds of, for the purpose of suicide . . .	423
Botany, Pupil's Introduction to, by Dr. Steggall . . .	281	Chlorine, preparation of grains and seeds by . . .	180
—, plan of Mr. Burnett's Lectures on . . .	566	Cholera, analysis of Dr. Christie's work on . . .	159
Brain, abscess in the, cured by the trephine . . .	452	Coffee, new kind of . . .	180
Breast, hydatid disease of female, diagnosis of . . .	328	Colica pictorum, treatment of by alum . . .	95
—, effect of common inflammation in, by Sir A. Cooper, Bart. . .	325	Conception, case of double, with double uterus . . .	178
—, Sir A. Cooper on the irritable tumor of the female . . .	337	Concussion of the brain . . .	38
—, Illustrations of Diseases of, by Sir Astley Cooper, Bart. . .	323	Contusions, appearances of, inflicted after death . . .	464
—, ecchymosis of the female, . . .	337	Convulsive epidemic, symptoms of, 79	
—, on the scrofulous swelling of the female . . .	334	Convulsions, remarks on infantile, from spasm of the intestines . . .	393
—, female, on the large and pendulous tumor of . . .	ib.	Cooper, Sir Astley, Illustrations of the Diseases of the Breast . . .	323
Broom seeds as a substitute for coffee . . .	180	—, Bransby, Esq. vase presented to him by his pupils . . .	567
Bronchotomy twice performed with success, in cases of laryngitis . . .	234	— v. Wakley, trial of . . .	83
Buffy coat of blood not a proof of the propriety of venesection, 550		Cornea, Dupuytren's treatment of spots on . . .	562
Bulimia, cases of . . .	267, 553	Corpuscles in the eye, case of . . .	121
Burns, treatment of, by flour . . .	297	Cough, on the effects of a shock of water in spasmodic . . .	452
		—, case of obstinate, cured by removal of elongated uvula . . .	559
Calculi removed from the bladder by urethral forceps . . .	519	Cranium, fracture of, followed by depositions of lymph in the lung and on the pleura . . .	40
Calculus impacted in the neck of the bladder and prostatic portion of the urethra . . .	237	Crystalline lens, on the reproduction of . . .	449
—, case of lachrymal . . .	78	Cuticle, exfoliation of . . .	556
Cambridge medical degrees, new regulations respecting . . .	377	Death from the prick of a pin . . .	462
Camphor in puerperal mania . . .	557	Degrees, new regulations with regard to the Cambridge medical . . .	377
Cancerous tubercles in different parts of the body . . .	134	Delirium senile, Burrows on . . .	65
Cancer, term applied to all swellings of the breast by uninformed surgeons . . .	324	— tremens, case of . . .	551
Carotid artery, aneurism of, cured by Valsalva's plan . . .	273	—, Mr. Smith on . . .	9
Catarrhus vesicæ of old persons, remarks on . . .	401	—, Dr. Burrows on . . .	61
Cervical vertebræ, fractures of . . .	49	Demerara, on diseases in, by Mr. Barcome . . .	283
Chemistry unable to detect the processes carried on in the animal and vegetable economy . . .	179	Diabetes successfully treated . . .	301
Cheonopodium olidum, recommended as an emmenagogue by Mr. Houlton . . .	278	Diamond, discovery of the mode of making the . . .	181
Chest, affections of, after injuries and operations . . .	318	Digestion, Dr. P. Wilson on the function of . . .	547
—, on diseases of, by Laennec . . .	338	Digitalis combined with quinine in consumption . . .	557
		Dissection, petition of the Westminster Medical Society on the supply of subjects for . . .	183
		—, Mr. Guthrie's letter on the supply of subjects for . . .	260
		Duodenum, perforation of the . . .	43

	PAGE		PAGE
Duodenum, ulceration and perforation of	76	Fruits, employment of slates for hastening the maturation of . .	180
Dysentery, Dr. Speers on, in the Essex prison-hulk	199	Fumigations, remarks on mercurial	384
Ear, effects of the section of the semicircular canal of, in birds .	76	Fungus hæmatodes, case of	368
Ecchymosis of the female breast .	337	_____ cured by alum	
Emmenagogue, Cheonopodium olidum used as an	278	_____ and the red oxyd of mercury .	273
Endermic method of using remedies	308	_____ of the eye, case of	141
Epidemic of Gibraltar	82	Gastrotomy, pretended operation for, in the case of a man who fancied he had a serpent in his belly	450
Ergot of rye in cases of leucorrhœa, by Dr. Marshall Hall . .	379	Gibraltar, epidemic of	82
Eruptions, artificial, in mania . .	74	_____, review of Mr. Fraser's Letter on the Febrile Distempers of	153
Erysipelas phlegmonodes treated by compression	81	Gleet cured by injection of seawater	275
_____ cured by compression	367	Grain prepared by chlorine	180
Essex prison hulk, Dr. Speers on the diseases on board the, in 1825-6-7	197	Guthrie, G. J. Esq., introductory lecture at the College of Surgeons	373
Exfoliation of the bones of the pelvis, causing obstinate sinuses .	410, 559	_____ on Inflammation of the Eyes	1
Exhalations, innocuous nature of putrid	277	Gyration and swinging in insanity .	71
Extra-uterine fœtation, case of, by Mr. Jewel	36	Head, injuries of	38, 41
_____ abdominal pregnancy, case of	275	Heart, atrophy of the	349
Eye, case of fungus of	141	_____ hypertrophy of auricles of, .	340
_____ case of cornscales in	121	_____ fatty degeneration of	350
Eyes, inflammation of the	1	_____ polypi of, and large vessels	351
Face, tumor successfully extirpated from	462	_____ rupture of	548
Fallopian tubes, obstruction of . .	452	_____ wound of, (patient lived one hour)	414
Flour as a remedy for burns . . .	297	_____ diseases of, caused by onanism	451
Femoral aneurism, spontaneous cure of, aided by pressure	413	_____ malformation of	548
Femur, union of the fracture of the neck of the	368	_____ extraordinary growth of .	547
Fœtation, remarkable case of preternatural, in which there was neither anus, funis, nor umbilicus	166	_____ on feigned diseases of, from use of hellebore	564
_____, case of extra-uterine, by Mr. Jewel	36	_____ causes of ossifications of .	343
Fœtus, functions of the intestinal canal and liver in, by Dr. Lee .	356	_____ softening of muscular substance of	347
_____, nourishment of, in the womb	167	_____ induration of the muscular substance of	ib.
Forbes, Dr. translation of Laennec on Diseases of the Heart	339	_____ on the changes produced by diseases of, in the texture of other organs	342
Foundling Hospital, Mr. Perry's appointment of surgeon to	471	_____ inflammation of inner membrane of, very rare	351
Fractures, Arabian mode of treating	175	_____ Laennec on Diseases of . . .	338
		_____ malformations of	349
		Hellebore causing apparent disease of the heart	564
		Hemorrhage, remarkable predisposition to	554
		_____ from the mammae, case of habitual	555

	PAGE		PAGE
Hemorrhage, efficacy of tannin in suppressing uterine . . .	456	Intestines, sudden protrusion of all the, into the scrotum . . .	415
Hennen, Dr. death of . . .	185	Intestine, six inches of, removed in case of strangulated hernia . . .	560
Herbivorous habit in an idiot . . .	276	Intoxication, efficacy of liquor ammonia in . . .	79
Hernia, remarks on obstructed . . .	425	Iron, on the presence of, in tin . . .	464
—, necessity of separating all the adhesions of intestines in operating for . . .	429	Irritable tumor of the female breast, Sir A. Cooper on . . .	335
—, operation for, may be necessary, without symptoms of strangulation . . .	435	Ischuria treated by cold affusions . . .	553
—, on inflamed . . .	430	—, singular case of . . .	515
—, treatment of . . .	ib.	Italy, state of Medicine in . . .	475
—, propriety of purging after operation for . . .	426	Jurisprudence, analysis of Mr. Forsyth's work on Medical . . .	541
—, Mr. Stephen's proposal for the radical cure of . . .	436	Knee-joint, case of diseased . . .	291
—, analysis of Mr. Stephens on . . .	425	Lachrymal calculus, case of . . .	78
—, case of strangulated crural, which, after gangrene had supervened, was cured by an artificial opening of the tumor . . .	123	Lambert, Mr. expelled from the Westminster Medical Society . . .	184
—, strangulated, reduced by external use of belladonna . . .	558	Laryngitis, bronchotomy successfully performed in two cases of . . .	234
—, umbilical, (operation performed fifteen days after first symptoms of) . . .	321	Larynx, disease of . . .	312
—, case of strangulated, (six inches of intestine removed) . . .	560	—, abscess of; unexpected death . . .	514
Herpes, Dupuytren's treatment of corroding . . .	562	Larvæ of insects and other animals found in the stomach and intestines . . .	151
Hindustan, on the Diseases in, by Mr. Walsh . . .	25, 102, 207	Leeches, preservation of . . .	276
Hip, presentation of the, in six successive labours in the same woman . . .	463	—, disease communicated by ib.	ib.
Hopkins, Dr. medals given by . . .	471	Leg, fracture of, communicating with the ankle-joint . . .	47
Hybrid, case of curions . . .	467	Lens, on the reproduction of the crystalline . . .	449
Hydatid disease of female breast, diagnosis of . . .	328	Leucorrhœa, ergot of rye in cases of . . .	379
Hydrocyanic acid, utility of cold affusions in cases of poisoning by . . .	387	Lime, chloride of, in sloughing sores . . .	561
Hydrophobia, no effects from the inoculation with the saliva in cases of . . .	552	—, universal diffusion of, in natural bodies . . .	179
Hydrophobia, case of . . .	169	Liston, Mr. of Edinburgh, denies that he is the author of Lectures on Aneurism attributed to him by the Lancet . . .	279
Hypertrophy of auricles of heart . . .	340	Lithotomy twice performed in one patient on the same day . . .	237
— of ventricles of the heart, signs of . . .	345	— performed twice in three days on the same patient, by M. Dupuytren . . .	21
Hysteria, acupuncture in . . .	171	—, difficult case of, operation . . .	130
Iliac artery, ligature of the external . . .	273	—, Bransby Cooper's relation of the case of, the subject of the libel in the Lancet . . .	127
— vein, obliteration of . . .	453	Lithotritie successfully performed . . .	412
Insanity, analysis of Dr. Burrows on . . .	61	Lobelia inflata, on the use of, in asthma . . .	538
Insects, remarks on the Leaf . . .	467	London University, prizes distributed at . . .	565
		Luke, Dr. death of . . .	473

	PAGE		PAGE
Lungs, œdema of, caused by diseases of the heart . . .	343	Nitrate of silver as a test for vegetable and animal matter . .	464
Luxations, remarks on the reduction of old . . .	318	Nympha, Dr. Granville's case of tumor removed by a jugum . .	460
Magnetism, Mr. Chenevix on . . .		Onanism, diseases of the heart caused by . . .	451
Animal . . .	219, 491	Operations succeeded by disease of the chest . . .	318
Mammary tumor, on the chronic, by Sir Astley Cooper . . .	333	Opium, Dr. Webster on East-Indian . . .	511
Mammæ, habitual hemorrhage from . . .	555	Opiates in insanity . . .	73
Mantis tribe, remarks on the . .	467	Ovarian tumor, hair and bones found in . . .	306
Measles, eruption of, on one side of the body . . .	553	Palsy, endermic method of treating . . .	309
—, sulphur employed to prevent . . .	269	Paralysis, acupuncture in . . .	269
Medical practice of Italy . . .	475	Parturition, analysis of Mr. Ashwell's Practical Treatise on . .	51
Medulla spinalis, alteration of, in a case of tetanus . . .	132	Pathological Anatomy, analysis of Dr. Craigie's Elements of . .	243
Menses, absence of, in a woman in whom the other signs of puberty existed . . .	452	Pelvis, exfoliation of the bones of, causing obstinate sinuses . .	410, 559
Menstruation, case of vicarious occurring during pregnancy . . .	55	Percussion, use of, to detect organic disease of the heart . .	339
Mercurial fumigations, remarks on . . .	384	Perineum, urinary abscess in the . .	310
— action accelerated by turpentine . . .	501	Pericardium, remarkable case of dropsy of . . .	407
Mesmerism, Mr. Chenevix on, 219, 491		Phlebitis after bleeding, Mr. Chinnock's case of . . .	176
Midwifery, six hip presentations in the same woman . . .	463	Phthisis pulmonalis sometimes contagious . . .	441
—, Mr. Waller's report of cases of . . .	115	—, on the direct application of remedies to the lungs in cases of . . .	445
—, Mr. Jewel's report of 100 cases of . . .	381	—, combination of quinine and digitalis in . . .	557
—, analysis of Dr. Ryan's Manual on . . .	51	Physicians, first meeting at the College of . . .	278
Milk abscess, treatment recommended by Sir Astley Cooper differs from that of Dr. John Clarke . . .	325	Physiology, Mayo's Outlines of . .	280
Mushrooms, indications of wholesomeness in . . .	179	Pin, suppuration and death from the prick of a . . .	462
Myrtifolia, coriaria, poisoning by the berries of . . .	292	Placenta, cases of absorption of the . . .	176
Nails, Mr. G. Burnett on diseases of . . .	91	— expelled four months after delivery . . .	563
Napoleon à Saint Hélène, by J. Hereau . . .	354	Pneumo-thorax, Dr. J. Johnson's case of . . .	360
Nerves, reunion of the ends of . .	76	Poisoning by the berries of Coriaria Myrtifolia . . .	292
Nervous system, central points of . .	75	Polypi of the heart and large vessels . . .	351
Neuralgia, efficacy of turpentine in . . .	203	Pregnancy with cancer of cervix uteri . . .	563
Nipples, Sir Astley Cooper's remedy for sore . . .	327	—, extra-uterine . . .	50
—, remedy for sore . . .	275	—, case of extra-uterine abdominal . . .	275
Nitrate of silver, on the use of, in inflammations, wounds, and ulcers, 521		Prize Questions . . .	472

	PAGE		PAGE
Prussic acid, utility of cold affusions in cases of poisoning by,	387	Strictures of the urethra, treatment of, by M. Dupuytren	35
Ptyalism, chronic, case of, cured	269	—, on the division of, by the lancetted stilettes	335
Puerperal insanity, Dr. Burrows on	62	—, analysis of Mr. Stafford's work on	ib.
— mania, camphor in	556	Sudorific medicines, Dr. Holland on	372
Pulmonary apoplexy, case of	359	Suicide, Dr. Burrows on	65
— Pathology, analysis of Dr. Myddelton's work on	436	Sulphur, method of detecting arsenic in	564
Putrid exhalations, innocuous nature of	277	— as a preventive of measles,	269
Quinine and digitalis, combination of, in consumption	557	Swinging in insanity	71
—, on the external use of	ib.	Tannin, efficacy of, in uterine hemorrhage	456
—, adulteration of	558	Tetanus, fatal case of, showing a remarkable alteration of the medulla spinalis	132
Ricini, oleum, use of, causing eruption	458	Textures, on the division of the animal	245
Rose, Thomas, Esq. death of	185	Thigh-bone, union of the fracture of the neck of	368
Sciatica, endermic method of treating	309	Throat, wound of	312
Serotum, morbid enlargement of	289	Tin, on the presence of iron in	464
—, sudden protrusion of all the intestines into	415	Tubercles, cancerous, case of, in different parts of the body	134
Sea-sickness, patent granted to Mr. Derbshire for his remedy	184	Turpentine, on the acceleration of the mercurial action by the use of	501
Secretions, experiments showing the quickness with which they are performed	357	—, efficacy of, in neuralgia	203
Seeds prepared by chlorine	180	Umbilical vein, Dr. R. Lee's case of inflammation of	455
—, preservation of, for vegetation	ib.	Urethra, treatment of strictures of, by M. Dupuytren	35
Seeing in water, on the power of, possessed by certain animals	264	Urinary abscess in the perineum, case of	310
Senile insanity, Dr. Burrows on	65	Uterine hemorrhage, efficacy of tannin in the suppression of	456
Silver detected in the internal viscera	467	— diseases, acetate of ammonia in	270
Skin, borax in diseases of	557	Uteri, pregnancy with cancer of cervix	563
Sleep in insanity	73	Uterus, enlargement of, containing a bag full of pus	452
Sloughing sores, chlorides of soda and lime in	561	—, case of double	178
Spasm of the intestines producing infantile convulsions	393	—, excision of	174
Spermatic vein, Dr. R. Lee's case of inflammation of	366	—, absorption by the	176
Spinal cord, destruction of portion of	267	—, on inflammation of the veins of the	267
Spleen, suppuration of	77	—, Dr. R. Lee's case of inflammation of the sinuses of	366
—, diseases of	167	Uvula, removal of elongated, in case of obstinate cough	559
Stomach, case of perforation of	217	Vagina, imperforation of the	78
—, conformation of the human	166	Vapour bath, Dr. Ridgway on the origin of the	215
Stone in the bladder contained in a cyst	131		
Straugulation of the intestines, not the only cause demanding the operation for hernia	436		

	PAGE		PAGE
Varicose veins, new suggestion as to the treatment of	409	Vitreous humor, ossification of	554
Vein, obliteration of the left iliac	453	Water, remarks on the effects produced by a shock of, by Dr. C. M. Clarke	458
Veins, inflammation of, after labour	420	Westminster Medical Society, petition of, respecting the supply of subjects for dissection	182
—, on inflammation of the	267	Wine, maturation of	180
Venous inflammation, Mr. Chinnock's case of	176	Wollaston, Dr. death of	185
Vertebrae, fracture of the, with curious symptoms	417	Worms, analysis of Mr. Rhind's Treatise on Intestinal	142
—, fractures of cervical	49	—, cure of	148
—, fracture of the dorsal	230	—, formation of, in the intestines	143
—, fracture of the cervical	232	—, symptoms of intestinal	147
Violence, effects of, on the body after death	464		
Viscera, silver detected in the internal, after use of Argent. Nitr.	467		

CRITICAL ANALYSES.

Manuel of Midwifery, by MICHAEL RYAN, M.D. &c.	51
Practical Treatise on Parturition, by SAMUEL ASHWELL, Surgeon; to which are appended two Papers, one containing some Remarks on Abdominal Surgery, the other on Transfusion, presented by Dr. BLUNDELL	ib.
Commentaries on Insanity. By Dr. BURROWS	61
Treatise on Intestinal Worms. By Mr. RHIND	142
Letter on the Gibraltar Fever. By W. W. FRASER, Esq.	153
Observations on Cholera. By Dr. CHRISTIE	159
Elements of General and Pathological Anatomy. By Dr. CRAIGIE	243
Letter on the Supply of Bodies for Dissection. By G. J. GUTHRIE, Esq.	260
Illustrations of the Diseases of the Breast. By Sir A. COOPER, Bart. &c.	323
Treatise on Diseases of the Chest. By Dr. LAENNEC	338
Napoleon à Sainte Hélène. By J. HEREAU	354
Treatise on Obstructed and Inflamed Hernia, &c. By H. STEPHENS	424
Dissertation on a New System of Pulmonary Pathology. By P. P. MYDDELTON, M.D.	439
An Essay on the Use of the Nitrate of Silver. By J. HIGGINBOTTOM	521
Further Observations on the Use of the Lancetted Stilettes in the Cure of permanent Strictures of the Urethra. By R. A. STAFFORD	534
Synopsis of Modern Medical Jurisprudence. By J. S. FORSYTH	541

COLLECTANEA	Pages 75, 106, 264, 356, 449, 547
INTELLIGENCE	81, 182, 278, 371, 468, 564
METEOROLOGICAL REGISTER	90, 186, 282, 378, 474, 570

NAMES OF AUTHORS,

Of whose Works, Observations, &c. either a detailed Account, or more or less general View, is given in the present Volume.

	PAGE
ADAM, Dr. on the Mantis Tribe	467
ANDREWS, Mr. on Lobelia Inflata	558
ASHWELL, Mr. analysis of his Practical Treatise on Parturition	51
BAILLIE, Dr. M. cases of Paraplegia	278
BARCOME, Mr. case of Sudden Death from Rupture of the Aorta	290
_____ on Diseases in Demerara	283
_____ on Enlargement of the Scrotum	289
BAUCHARD, Mr. on the employment of Slates for hastening the Maturation of Fruits	180
BEDOR, Dr. case of extraordinary Growth of the Heart	547
BERNDT, Professor, on Camphor in Puerperal Mania	556
BIGNARDI, Dr. case of Rupture of the Heart	548
BLANDIN, M. case of large Calculus in the Bladder	237
BRIGHT, Dr. case of Extra-uterine Pregnancy	50
BRODIE, Mr. case of Injury of the Head	41
_____ case of Fracture and Dislocation of a Lumbar Vertebra	417
BOUGON, M. on the Treatment of Erysipelas Phlegmonodes by Compression	81
BURNETT, Mr. case of Diabetes	301
_____ on Diseases of the Nails	91
BURROWS, Dr. analysis of his Commentaries on Insanity	61
CABARET, Dr. case of Imperforate Vagina	78
CAFFORT, M. case of Hernia	123
CAYOL, M. his case of Abscess of the Larynx and Sudden Death	514
CHENEVIX, Mr. on Mesmerism	219, 491
CHINNOCK, Mr. H. S. on Venous Inflammation	187
CHRISTIE, Dr. analysis of his work on Cholera	159
CHRISTISON, Dr. on the Effects of Violence on the Body after Death	464
CHURCHILL, Mr. J. M. Medical Botany	282
CIVIALE, Dr. on Catarrhus Vesicæ	401
CLARKE, Dr. C. M. on the Effect of a Shock of Water in Neuralgia	458
CÔCTEAU, M. on the Reproduction of the Crystalline Lens	449
COOPER, Sir ASTLEY, analysis of Illustrations of Diseases of the Breast	323
COOPER, Mr. B. S. case of Lithotomy, (the subject of the Libel in the Lancet)	127
COPPELAND, Mr. case of Destruction of a Portion of the Spinal Cord	267
COUPER, Dr. cases of Laryngitis	235
CRAIGIE, Dr. analysis of his Elements of General and Pathological Anatomy	243
DANCE, Dr. on Inflammation of Veins	267
DAVY, Dr. on Nitrate of Silver as a Test for Vegetable and Animal Matter	464
_____ on the Appearances of the Blood in Disease	530
DESCHARMES, M. P. on a Substitute for Coffee	180
DOYLE, Dr. reflections on Colica Pictonum	285
DUFFIN, Mr. on Deformity of the Spine	280
DUPUYTREN, M. on Treatment of Strictures of the Urethra	35
_____ on Spots in the Cornea	562
_____ case of Strangulated Umbilical Hernia	321
_____ case of Lithotomy	21
_____ on Femoral Aneurism	173
EARLE, Mr. case of Wound of the Abdomen	48
FISCHER, M. on the Presence of Iron in Tin	464

	PAGE
FLETCHER, Mr. case of Gleet cured by Sea-water Injections . . .	275
FLOURENS, M. on the Central Points of the Nervous System . . .	75
FORSYTH, Mr. analysis of his Synopsis of Modern Medical Jurisprudence . . .	541
FRANCOIS, Dr. case of an Idiot of an Herbivorous Habit . . .	276
FRASER, Mr. W. W. review of his Letter on the Gibraltar Fever . . .	153
GALY, M. on Corpuscles in the Eye . . .	121
GANAL, M. on the Mode of making the Diamond . . .	181
GEISS, Dr. case of Double Uterus and Double Conception . . .	178
GIBSON, Professor, case of Axillary Aneurism . . .	314
GLIONNA, Dr. case of Suppuration of the Spleen . . .	77
GODRICH, Mr. his case of Hydrophobia . . .	169
GOOD, Dr. J. M. his remarkable case of Preternatural Fætation . . .	166
GORDON, Dr. G. A. on the State of Medicine in Italy . . .	475
GRANVILLE, Dr. A. B. case of Removal of a Tumor from the Nympha by a Jugum . . .	460
GREEN, Mr. on Mercurial Fumigations . . .	384
GUILLERY, M. case of Twins and Inflammation of the Womb . . .	420
GUNTHER, Dr. on Quinine and Digitalis in Consumption . . .	537
GUTHRIE, Mr. on Inflammation of the Eyes . . .	1
— on the Supply of Bodies for Dissection . . .	460
—, his Introductory Lecture at the College of Surgeons . . .	373
HALL, Dr. MARSHALL, on Ergot of Rye in Leucorrhœa . . .	379
HASSELL, Dr. on Chlorides in Sores . . .	561
HASTINGS, Dr. his case of Ischuria . . .	515
HAWKINS, Mr. C. case of Urinary Abscess . . .	310
— case of Wound of the Throat . . .	312
HERBST, Dr. E. F. G. on Cold Affusion in Poisoning by Prussic Acid . . .	387
HEREAU, M. J. analysis of Napoleon à Sainte Hélène . . .	354
HERING, Professor, on the Velocity of the Motion of the Blood, &c. . .	357
HIGGINBOTTOM, Mr. analysis of his Essay on the Use of Nitrate of Silver . . .	521
HOLLAND, Dr. on Sudorific Medicines . . .	372
HOULTON, Mr. on the Emmenagogue Powers of Cheonopodium Olidum . . .	278
HUTCHISON, J. Esq. case of Tumor removed from the Face . . .	462
JACOBSON, Dr. case of Habitual Hemorrhage from the Mammæ . . .	554
JEWEL, Mr. S. W. case of Diseased Knee . . .	291
JEWEL, Mr. G. case of Extra-uterine Fætation . . .	36
— Report on Midwifery . . .	381
JOHNSON, Dr. JAMES, case of Pneumo-thorax . . .	360
KEY, Mr. his case of Calculus removed from the Bladder by the Urethral Forceps . . .	519
KREHN, M. case of Ossification of the Vitreous Humor . . .	554
KRIMER, M. case of Lachrymal Calculus . . .	78
— on Diseases of the Heart from Onanism . . .	451
LAENNEC, Dr. analysis of his Treatise on Diseases of the Heart . . .	338
LAUBREIS, Dr. case of Pregnancy with Cancer of the Uterus . . .	563
LAWRENCE, Mr. case of Fracture of the Vertebrae . . .	230
LEE, Dr. ROBERT, case of Inflammation of the Umbilical Vein . . .	455
— on the Functions of the Intestines and Liver in the Fœtus . . .	356
— on Inflammation of the Spermatic Vein . . .	366
LEONARD, Mr. J. case of Perforation of the Stomach . . .	217
LISFRANC, M. case of Excision of the Uterus . . .	174
LUGOL, Dr. case of Cancerous Tubercles . . .	133
LYFORD, Mr. case of Spontaneous Cure of Femoral Aneurism . . .	412
MACPHERSON, Mr. G. case of Fungus Hæmatodes . . .	368
MAGLIARI, Dr. case of Strangulated Hernia reduced by external use of Belladonna . . .	558
MARSHALL, Mr. on Treatment of Burns . . .	297
MARTINET, M. on the use of Turpentine in Neuralgia . . .	203
MAYO, Mr. on Physiology . . .	280
MAYO, Mr. C. case of Aneurism of the Aorta . . .	553

	PAGE
MAURY, M. case of a Man who fancied he had a Serpent in his Belly	450
MITIVIE, Dr. case of Extra-uterine Abdominal Pregnancy	275
MONTANCEIX, M. on Colica Pictorum treated by Alum	95
MORREAU DE JONNES, M. on the Epidemic of Gibraltar	82
MYDDELTON, Dr. on a new System of Pulmonary Pathology, analysis	439
NÆGELE, Dr. on Absorption by the Uterus	176
NEWELL, Dr. case of Exfoliation of the Cuticle	552
PARRISH, Dr. on Infantile Convulsions	390
PATIN, M. on the use of the Acetate of Ammonia in Uterine Diseases	277
PHILIP, Dr. A. P. W. on Digestion	549
PHYSICK, Dr. case of Elongation of the Uvula	556
PINGRENON, Dr. case of Pulmonary Apoplexy	359
POGGI, Dr. case of Tetanus	133
PORTA, Dr. on the use of Tannin in Uterine Hemorrhage	456
PORTER, Dr. case of Bulimia	553
QUARRIER, Dr. on Feigned Diseases of the Heart	564
RAMSBOTHAM, Dr. F. cases of Malformation of the Heart	548
REINHARDT, Dr. on Borax in Diseases of the Skin	557
REMOUD, M. on the Preparation of Grain and Seeds by Chlorine	180
RENTON, Dr. case of Delirium Tremens	551
REYNAUD, M. case of Ovarian Tumor	306
—— case of Absence of the Menses in a Woman	452
—— case of Obliteration of the left Iliac Vein	453
RHIND, Mr. analysis of his Treatise on Worms	142
RICHERAND, Mr. case of Ligature of the external Iliac Artery	273
RIDGWAY, Dr. on the Vapour Bath	215
ROBERT, M. (Hôtel Dieu,) on Ulceration and Perforation of Duodenum	76
ROUX, M. case of Abscess in the Brain	452
—— cases of Poisoning by the Berries of the Coriaria Myrtifolia	292
RYAN, Dr. analysis of his Manual on Midwifery	51
SCHREYER, Dr. case of remarkable Disposition to Hemorrhage	554
SCHUTTE, Dr. on the Cure of Fungus Hæmatodes by Alum, &c.	273
SHEPPARD, Mr. case of Fracture of the Leg	47
SIMPSON, Dr. case of Hernia, six inches of Intestine removed	560
SMITH, Mr. J. on Delirium Tremens	9
SOEMMERING, M. S. T. on the Conformation of the Human Stomach	166
SOUQUET, M. case of chronic Ptyalism	269
SPEER, Dr. on Diseases on board the Essex	197
SPERANZA, Dr. on the external use of Quinine	557
STAFFORD, Mr. analysis of his Essay on Strictures	534
STEGGALL, Dr. Introduction to Botany	281
STEPHENS, Mr. on Obstructed and Inflamed Hernia, analysis	424
STEPHENSON, Dr. Medical Botany	282
STRETTON, Dr. case of Perforation of the Duodenum	45
SYME, Mr. on Exfoliation from the Bones of the Pelvis	410, 559
TRAVERS, Mr. cases of Injuries of the Head	38
TWINING, Mr. W. case of Fungus of the Eye	141
—— on Diseases of the Spleen	169
TYRRELL, Mr. case of Fracture of the fourth Cervical Vertebra	232
WALLER, Mr. Report on Midwifery	115
WALSH, Mr. J. on Diseases in Hindostan	25, 102, 207
WEBSTER, Dr. J. on East-Indian Opium	511
WEDEMMEYER, Dr. case of Silver detected in the internal Viscera	467
WICKHAM, Mr. case of Lithotomy	131
WILSON, Dr. J. on the Association of Turpentine and Mercury	501
WOOD, Mr. case of Dropsy of the Pericardium	406

1. The first part of the paper discusses the importance of the study of the history of the United States. It is argued that the study of the history of the United States is essential for a full understanding of the country and its people. The paper then discusses the importance of the study of the history of the United States in the context of the current political and social climate.

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